Mississippi College Law Review

Volume 26
Issue 1 *Vol. 26 Iss. 1*

Article 3

2007

A Nation of Policyholders: Governmental and Market Failure in Flood Insurance

Adam F. Scales

Custom Citation
26 Miss. C. L. Rev. 3 (2006-2007)

A NATION OF POLICYHOLDERS: GOVERNMENTAL AND MARKET FAILURE IN FLOOD INSURANCE

Adam F. Scales[1]

"If there's a dime lying somewhere along the Gulf Coast of Mississippi, there's an insurance company that's gonna bend down to pick it up."[2]

I. INTRODUCTION

Unfortunately, Attorney General Hood's colorful observation has proven untrue. Hurricane Katrina's direct physical toll has been estimated to exceed $200 billion, only a fraction of which is recoverable under existing insurance law.[3] As many policyholders and citizens have realized, insurance is something we tend to think about only after a disaster. Indeed, this oversight is a central explanation for why the system for allocating flood losses in the United States has failed.

Now that Katrina's waters have receded, it is time to reconcile insurance law and policy to reality: Catastrophic losses create interdependencies among public and private actors that must be managed rather than avoided. Our current systems for preventing, mitigating, and allocating these losses are fractured, diffuse, and maddeningly counterproductive. No

---

1. Associate Professor of Law, Washington and Lee University. I am grateful to Tom Baker, Peter Siegelman, Jeff Stempel, and David Reiss for their comments on drafts as well as suggestions for this research. Faculty workshops at Washington and Lee and the University of Connecticut proved invaluable as well. This project was funded by the Frances Lewis Law Center at Washington and Lee University School of Law, and warmly offered a home in this Symposium to which it contributes a small yet distinct voice.

Subsequent to the presentation and drafting of this Article, I was retained as a consultant by counsel representing policyholders in part of the Katrina insurance litigation. My views, long predating that engagement, are a matter of public record. Adam Scales, *How Will Homeowners Insurance Litigation After Katrina Play Out?*, FINDLAW, Sept. 19, 2005, http://writ.news.findlaw.com/commentary/20050919 scales.html; Adam Scales, *Hurricane Katrina: Will Insurance Cover the Damage? The First Trial Suggests the Answer Is Yes and No*, FINDLAW, Aug. 18, 2006, http://writ.news.findlaw.com/commentary/2006 0818_scales.html; Adam Scales, Remarks at *Katrina Liability Issues*, AEI Panel (Oct. 2005); Adam Scales, Remarks at *Insurance and Risk Allocation in America: Economics, Law, and Regulation*, AEI-Brookings Joint Center for Law and Regulatory Studies (Sept. 2006). I have not hesitated to criticize extraordinarily creative, catastrophically generous decisions in favor of Katrina claimants. Adam Scales, *Insurance Ex Machina: A Significant Federal Decision in New Orleans on Post-Katrina Litigation*, FINDLAW, Dec. 11, 2006, http://writ.news.findlaw.com/commentary/20061211_scales.html.

2. Mississippi Attorney General Jim Hood, Remarks at *Hurricane Katrina: A Legal Symposium*, Mississippi College School of Law (Aug. 29, 2006).

3. *See* Martin Wolk, *How Hurricane Katrina's Costs Are Adding Up: Insurance Industry Costs Plus Federal Outlays Could Equal "$200 Billion Event,"* MSNBC.COM, Sept. 13, 2005, http://www.msnbc.msn.com/id/9329293/. Such estimates do not capture the wide-ranging economic impact of social dislocation in the wake of a catastrophe, and neither do existing insurance mechanisms. For example, RAND estimates that New Orleans may regain just over half of its pre-Katrina population by September 2008. Press Release, Rand.org, *RAND Study Estimates New Orleans Population to Climb to About 272,000 in 2008*, Mar. 15, 2006, http://www.rand.org/news/press.06/03.15.html. No extant insurance product indemnifies against the depopulation and economic leveling of a metropolis.

single actor is vested with both the incentive and the power to manage this risk effectively.

As with healthcare, the system for allocating catastrophic loss is characterized primarily by the evasion of responsibility at all levels: private, commercial, and governmental. The result (as in healthcare) has been dysfunction. Before Katrina's seemingly indelible memories recede—as they are destined to—it is time to recalibrate the relationship between government and the private market.

This Article focuses on the two insurance systems that inadequately govern the distribution of flood risk: The National Flood Insurance Program ("NFIP") and the private market for property insurance. There have been a number of studies detailing the structure and limits of these systems. However, scant attention has been directed toward the role that insurance *law* plays in driving the systems toward failure. What follows is a synthesis of insurance law, economics, and regulatory criticism, leading to the ineluctable conclusion that these two systems rest on a foundation of sand.

I propose a market-based alternative that draws on the comparative advantages each system offers. To the information-generating of the marketplace, we may add a more precisely targeted governmental role in subsidizing some policyholders and reinsuring others. There are inevitable tradeoffs, and my proposal has a number of drawbacks—only some of which can be guessed at here. But the alternative is a system that has proven itself unable to cope adequately with the predictable losses of a bad year, let alone the greatest natural disaster in American history.[4]

II. From Public to Private and Back

Insurance is the principal private mechanism for distributing risks across time and space. Government is its public counterpart, and they share many attributes. Structurally, they are means to reduce the incidence and severity of risk, while ameliorating its impact when it cannot be avoided. Conceptually, there is no limit to the scope of hazards potentially controllable by these mechanisms: Death may come for all, but its financial impact can be diffused by life insurance or government survivor's benefits. Oil drilling's spectacular capacity for spontaneous combustion made the early petroleum industry untenable—until insurance products were devised to smooth out the vagaries of chance.

4. Katrina destroyed approximately 275,000 homes (estimates vary) and is expected to result in 1.6 million insurance claims. This Article concerns itself primarily with flood-related losses and identifies claiming dynamics that make the resolution of such losses particularly problematic. However, a strong argument exists for applying its analyses and recommendations to all forms of catastrophic loss, and several commentators have urged comprehensive inclusion of catastrophe risks in homeowners policies. Robert E. Litan, *Preparing for Future "Katrinas,"* THE BROOKINGS INSTITUTION, Policy Brief #150 (Mar. 2006), *available at* http://www.brookings.edu/comm/policybriefs/pb150.pdf; Howard Kunreuther, *Has the Time Come for Comprehensive Natural Disaster Insurance?*, *in* ON RISK AND DISASTER: LESSONS FROM HURRICANE KATRINA (Ronald J. Daniels, Donald F. Kettl & Howard C. Kunreuther eds., 2006); *see also* Raymond J. Burby, *Hurricane Katrina and the Paradoxes of Government Disaster Policy: Bringing About Wise Governmental Decisions for Hazardous Areas*, THE ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE, Vol. 604 No. 1 (2006).

Government may take on an obvious role as insurer, as when it provides Social Security or Medicare. It may assume insurance roles that private insurance is unlikely to play, as evidenced by Churchill's more-or-less extemporaneous decision to regard private losses incurred during the London Blitz as "a charge upon the State."[5] Less obvious is the insurance character of many government activities, including the maintenance of national defense, the creation of a public health infrastructure, and product regulation. These quintessentially governmental activities typically involve neither explicit ex ante payments ("premiums") nor cash transfers from groups to individuals ("benefits" or "claims"). Yet they all shape the redistribution of risk as surely as private insurance does.

Even less obvious are the governance roles played by private insurance. Insurance systems create strong incentives for private actors to do more than take the risk landscape as they find it; insurance companies predicate their willingness to write policies on the employment of risk-reduction strategies by insureds and other actors.[6] In turn, insureds find that many activities are simply infeasible absent insurance. For individuals, auto insurance is a (somewhat under-enforced) condition of registering a car, and no lender is willing to offer a mortgage without homeowners coverage in place. These arrangements create positive externalities not only for obvious beneficiaries such as other motorists, but for homebuilders, communities, and society as a whole.

Private insurance arrangements can thus complement or—in theory—entirely supplant public regulation as access to risk spreading becomes essential for private activity. But insurers are no more interested in creating positive externalities than any other class of rational actors. The beneficiaries of those externalities are similarly disposed to reap without toil absent an enforcement mechanism. In a market economy within a decentralized system of government, such mechanisms are hard to come by. This is the picture of dysfunctional interdependence that emerges from the study of flood insurance risks.

5. WINSTON S. CHURCHILL, MEMOIRS OF THE SECOND WORLD WAR 371–72 (Houghton Mifflin 1987).

6. *See generally* RICHARD V. ERICSON, AARON DOYLE & DEAN BARRY, INSURANCE AS GOVERNANCE (Univ. of Toronto Press 2003); TOM BAKER & JONATHAN SIMON, EMBRACING RISK: THE CHANGING CULTURE OF INSURANCE AND RESPONSIBILITY (Univ. of Chicago Press 2002). A fascinating, if somewhat humbling study of this thesis is emerging in a series of articles by Professors Tom Baker and Sean Griffith. Drawing on the "insurance as governance" literature, they extend it through a qualitative study of the relationship between corporate governance practices and D&O insurers. Tom Baker & Sean J. Griffith, *Predicting Corporate Governance Risk: Evidence from the Directors' and Officers' Liability Insurance Market*, U. CHI. L. REV. (forthcoming 2007). D&O liability has received substantial public, scholarly, and legal attention in the post-Enron era; insurance governance theory predicts that liability insurers, as the ultimate internalizers of corporate misgovernance risks, ought to be developing and enforcing models of "best practices" upon corporate officers in order to mitigate those risks. In fact, Professors Baker and Griffith have discerned little, if any, evidence of systematic private governance by D&O insurers. Tom Baker & Sean J. Griffith, *The Missing Monitor in Corporate Governance: The Directors' and Officers' Liability Insurer*, GEO. L.J. (forthcoming 2007).

Historically, the principal source of flood-related risk was riverine (i.e., the overflow of rivers) rather than coastal.[7] The fertile soils of the alluvial plain constituted a tremendous resource that could not be exploited adequately because of periodic flooding.[8] Since the 1830s, the federal government has acted to control flooding, principally through levees and other public works projects. The U.S. Army Corps of Engineers, which is primarily responsible for these tasks, has been an enthusiastic proponent of its services.[9]

Flood control projects merely buy time. It has been observed that there are two types of levees: Those that have failed, and those that will.[10] Thus, the government has been obliged to offer post-disaster assistance in the form of loans and grants to flood victims. This points to a self-destructive pattern that has long characterized flood mitigation efforts. As flood-control works are brought online, the value of once—and future—flood-ravaged lands increases. Residential and commercial development (along with agricultural) are attracted, often resting on long-term assumptions about the suitability of the area for development.[11]

Of course, such efforts have marked the upward ascent of civilization; there is nothing inherently wrong with taming wilderness for development. But doing so magnifies exponentially the economic risks flood control projects are designed to manage. By creating the illusion that alluvial and coastal plains can be made safe for development, government policy ensures that there will be greater dislocation when—not if—that safety is revealed as illusory. It is no surprise that, by the 1990s, flood losses averaged over $6 billion annually.[12] In the absence of firm risk management controls, the tendency of flood losses is both cyclical and upward.

---

7. Rawle O. King, *Federal Flood Insurance: The Repetitive Loss Problem*, CONG. RESEARCH SERV.,CRS REP. RL32972, at CRS-5 (June 30, 2005), *available at* http://www.fas.org/sgp/crs/misc/RL 32972.pdf. Hurricane Katrina has single-handedly reversed that pattern, creating losses that exceed all combined riverine losses in recorded American history.

8. Readers not familiar with the geology of the Mississippi River basin system may find excellent technical descriptions in MARC REISNER, CADILLAC DESERT (Penguin Books 1993) and JOHN M. BARRY, RISING TIDE: THE GREAT MISSISSIPPI FLOOD OF 1927 AND HOW IT CHANGED AMERICA (Simon & Schuster 1997). A typical riverine flood plain may extend for dozens of miles beyond a river's banks; even a modest overflow can inundate hundreds of thousands of square miles because there are no natural obstructions.

9. Rarely has validity of public choice theory been so comprehensively sustained. *See* REISNER, *supra* note 8 (documenting the federal government's unswerving confidence in its abilities to reshape the landscape to its liking, realities notwithstanding).

10. "For over a hundred years, man has thought that he could tame the waterways. We have built 'levees, then floodways, then reservoirs, and finally pumping, drainage, and channel building projects to protect and facilitate development of the nation's floodplains.' At nearly every step, we have lost." Beth Davidson, *How Quickly We Forget: The National Flood Insurance Program and Floodplain Development in Missouri*, 19 WASH. U. J.L. & POL'Y 365, 388 (2005).

11. *See* Burby, *supra* note 4, at 6 (explaining how the intended effect of facilitating development has unintended effect of increasing particularly risky development).

12. This represents a doubling since the 1980s. *See* King, *supra* note 7, at CRS-1. Although global warming or cyclical climate changes may explain part of this increase, it is more likely due to the changes in residential patterns and asset appreciation induced by flood-mitigation efforts, including flood insurance.

Private flood insurance was once widely available in two related forms. First, because of a long-standing conceptual error,[13] flooding losses were often covered as a type of accident within the meaning of accident policies. Second, flood insurance could be added to the perils covered in a fire insurance policy, which until the 1950s was the dominant form of personal property coverage available.[14] Several features of flood insurance have made it unattractive for private insurers, and what interest there was ended with the two thousand miles of flooding that took place along the Mississippi River in 1927.[15]

The absence of private insurance only exacerbated the pressure on the government to mitigate the effects of flood losses. Moreover, the 1927 flood also ushered in a sustained expectation of federal assistance—an expectation subsequently nurtured by the New Deal. It is surely no coincidence, then, that the federal government formalized its role in flood risk management during the brief apogee of post-New Deal confidence in governmental effectiveness. The NFIP is not among the most familiar of Great Society programs, but, like its cousins, it stands as a monument to genuine optimism.

III. The Twin Failures of Catastrophe Risk Management

The NFIP is the government's answer to market failure in flood insurance. Less obviously, it is also an administrative technology for addressing *governmental* failure in flood mitigation.

A. *Market Failure*

Market failure may be defined as a condition in which economically rational transactions do not take place.[16] Flood insurance, like any casualty, is not inherently uninsurable. However, it suffers from unusual demand- and supply-side constraints that make it a relatively difficult market for insurers, and they have responded rationally by avoiding it.

13. *See* Adam F. Scales, *Man, God and the Serbonian Bog: The Evolution of Accidental Death Insurance*, 86 Iowa L. Rev. 173 (2000).

14. Fire policies eventually were enfolded within a package of insurances comprising the modern homeowners policy.

15. *See* King, *supra* note 7, at CRS-2 n.7. Private insurance has remained available on a limited basis in two principal forms: "Difference in Conditions" coverage protecting business from the economic dislocation of flooding (though the amount of coverage available does not provide true catastrophic protection) and flood insurance, which has been recently rolled into high-end homeowners policies by a few insurers in select markets. *See* Rachel Emma Silverman, *Flood Coverage for Costly Homes*, RealEstateJournal.com, Sept. 2, 2005, http://www.realestatejournal.com/buysell/taxesandinsurance/20050902-silverman.html.

16. There appears to be little disagreement among economists that insurance against catastrophic loss is indeed a victim of market failure. *See* Mario Jametti & Thomas von Ungern-Sternberg, *Risk Selection in Natural Disaster Insurance—the Case of France* 2–3 (CESinfo, Working Paper No. 1683, 2006), *available at* http://www.cesifo-group.de/~DocCIDL/cesifo1_wp1683.pdf. Interestingly, there does appear to be dissent from some insurance companies and insurance professionals. At a conference at which the author was invited to speak, a senior attorney working on behalf of the insurance industry stated that there was no market failure for catastrophic loss. Relatedly, at another conference, a senior officer of a major reinsurer dissented from the author's position on insurance law reform by

1. Insurers and Uncertainty

The science of hydrology was very poorly understood in the late nineteenth century, and insurance regulation in something like its modern form emerged only gradually throughout the twentieth. The history of insurance companies until well into the 1900s is one of boom and bust, and a substantial flood could easily founder undercapitalized insurers. By the mid-to-late twentieth century, this information deficit was essentially unchanged as far as private insurers were concerned.[17] Without reasonably accurate data to generate loss predictions, insurance cannot be correctly priced. In that environment, insurers will either decline to provide coverage entirely or will charge what Howard Kunreuther has labeled an "ambiguity premium" that reflects surprisingly pronounced risk aversion by the insurer.[18]

Furthermore, flood insurance presents a vexing adverse selection problem. The people most likely to buy insurance against flood losses are also the most likely to suffer them. That is, the motivated pool of actual insurance consumers is generally more risky than the pool of all potential consumers. Adverse selection occurs when insureds know more about their risk profiles than their insurers. Although this is unlikely to be true for a *group* of policyholders (whose riskiness is likely to be average), it can be true for *particular* consumers of insurance. Much of the economic structure of the insurance contract is designed to minimize the risk that insureds will obtain incorrectly-priced protection. To the extent that a consumer has particular insight into his riskiness (e.g., whether one locks one's car or the amount one smokes), insurers will either charge an inadequate premium or write insurance they otherwise would decline.

2. Adverse Selection

Adverse selection has long been thought capable of creating a "death spiral" in which an unfortunate insurance pool begins to attract riskier insureds and to deter good risks—because the former are getting a good deal

arguing that, given the high rates of closed claims following Katrina (estimates range from the high-80s to mid-90s), there was, a priori, no problem in need of reform.

This view may be understood as an indication of the extent to which insurers believe that catastrophic losses are not their concern. Given that an event on the scale of Katrina has left the insurance industry relatively unscathed (it has thus far expended approximately $50 billion in a disaster that has inflicted at least $200 billion in direct losses), such events may be thought not to directly threaten the health of the insurance industry. In that sense, perhaps, there is "no problem."

In this Article, I offer some reasons why insurers are not as insulated as they believe; in fact, their exposure to certain catastrophic losses is significantly higher than insurance language and extant catastrophe models predict. My thesis is that catastrophic losses are, indeed, everyone's problem—but particularly insurers'.

17. King, *supra* note 7, at CRS-2; Edward T. Pasterick, *The National Flood Insurance Program*, *in* PAYING THE PRICE: THE STATUS AND ROLE OF INSURANCE AGAINST NATURAL DISASTERS IN THE UNITED STATES, at 125–154 (Howard Kunreuther & Richard J. Roth eds., 1998).

18. Howard Kunreuther, *The Need for Comprehensive Disaster Insurance: Roles of the Public and Private Sector*, *in* ON RISK AND DISASTER: LESSONS FROM HURRICANE KATRINA 182 (Ronald J. Daniels, Donald F. Kettl & Howard C. Kunreuther eds., 2006) (citing Howard Kunreuther et al., *Insurer Ambiguity and Market Failure*, 7 J. RISK & UNCERTAINTY 71–87 (1993)) (documenting survey research finding hypothetical average premiums set by insurers would be 1.43 to 1.77 times higher for ambiguous probabilities of loss, versus well-specified probabilities *for the same risk*).

and the latter are overpaying. In theory, such a pool will eventually collapse, as the necessary rise in premiums reshapes the pool into an increasingly narrow band of highly risky consumers who (at some point) can no longer afford the actuarially correct premium.[19]

Peter Siegelman has offered a powerful refutation of the long-held assumption that such collapses are inevitable and have in fact been observed.[20] However, the inexactness of early flood insurance practices imparts a unique plausibility to the view, commonly held in the insurance industry, that adverse selection risk is a significant deterrent to private flood insurance. Moreover, this industry view might contribute to what Mario Jametti and Thomas von Ungern-Sternberg have described as "risk selection," in which private agents cede high insurance risks "to the public part of the private-public partnership."[21] This dynamic helps to explain insurers' reticence to re-enter the flood insurance market, particularly where the government has already stepped in.

3. Perception-Based Demand Constraints

A contrapuntal challenge to insurance for catastrophic loss is a lack of demand. Individuals routinely underestimate the likelihood of low-probability, high-loss events. Potential consumers bring a cluster of heuristics to their decision to purchase insurance, all of which depress demand. These heuristics can be divided into two basic categories.

Meteorologists, hydrologists, and actuaries attach specific meaning to terms such as "100-year flood."[22] The term means that there is a 1% annual probability of a flood occurring to a specified height over a certain area. What the average person actually understands, however, is that once there has already been such a flood in his area, he is safe for the next ninety-nine years.[23] In fact, the risk of flood is unchanged, as is the rationality of purchasing flood insurance. The failure to apprehend this concept is known as the gambler's fallacy.

At the same time, individuals respond differently to risks that present themselves as remote or abstract than to those that are salient—i.e., distinctive. Risk perceptions change in the presence of recent disasters in ways that can be quite favorable (albeit briefly) for insurance decisions.

---

19. In this classic insurance nightmare, one sees the contradiction at the heart of private insurance: Insurance works—indeed, it is "insurance," rather than something else—only because of the uncertainty as to the timing, magnitude, or distribution of losses. Competitive insurance markets tend over time to reduce uncertainty by screening for risk. As they do, insurance pools become increasingly homogenous and individual variation within them less likely. But in a perfectly homogenous insurance pool, there would be no consumers, for there is no "risk" to insure.

20. Peter Siegelman, *Adverse Selection in Insurance Markets: An Exaggerated Threat*, 113 YALE L.J. 1223 (2004).

21. Jametti & von Ungern-Sternberg, *supra* note 16, at 2.

22. Kunreuther, *supra* note 4, at 199.

23. *See, e.g.*, Robert J. Aalberts, *Hurricane Katrina: Will New Orleans Real Estate Emerge from the Devastation?*, 34 REAL EST. L.J. I, i (2005) (wherein the author, editor-in-chief of a journal devoted to real estate law, acknowledges he routinely assumed that his New Orleans apartment, once flooded, certainly would not soon be hit again by a "100-year flood").

Immediately after disasters, people's ability to recognize and correctly attribute the risks of the disaster is heightened; this undoubtedly explains the rise in demand for flood insurance during the two years after Hurricane Andrew and the year since Hurricane Katrina. However, with time, the sense of risk fades and people return to their pre-catastrophe optimism. Robert Meyer has offered a resume of these phenomena and relevant literature that cannot be improved upon by repetition here.[24]

4. Post-Occurrence Insurance

One of the more intriguing hypotheses regarding the lack of demand for catastrophic insurance coverage is the idea that rational consumers may well forgo purchasing insurance now because they expect to be provided with "free insurance" later in the form of government grants, loans, or other forms of post-disaster insurance.[25] This is an extremely appealing hypothesis, but Kunreuther and others point out that it has not been substantiated. For one thing, post-disaster flood assistance has predominantly taken the form of Small Business Association loans which are hard to characterize as windfalls. Moreover, community-level disaster relief is correlated with greater local mitigation efforts. Post-loss assistance does not, therefore, appear to be associated with lesser prospective care, an as-yet unexplained result that Kunreuther correctly describes as "counterintuitive."[26] Although it would seem extremely odd for individuals' risk decisions to be totally unaffected by the expectation of future assistance, for now the hypothesis must be characterized as "not proven."[27]

Another theme that recurs in explanations of insurers' unwillingness to provide coverage is the concept of correlated losses. Casualty losses are generally uncorrelated. That is, the likelihood that the reader will be involved in a traffic accident today has almost no bearing on whether his neighbor will as well. Even devastating losses (such as fire or collapse)

---

24. Robert J. Meyer, *Why We Under-Prepare for Hazards*, *in* ON RISK AND DISASTER: LESSONS FROM HURRICANE KATRINA (Ronald J. Daniels, Donald F. Kettl & Howard C. Kunreuther eds., 2006).

25. Burby, *supra* note 4, at 9 (citing the House Bipartisan Natural Disasters Task Force Report in 1994).

26. Kunreuther, *supra* note 4, at 183.

27. Burby, *supra* note 4, at 11–12 (concluding that multivariate analysis does not sustain significant correlation between NFIP payments and responsible land use policies); LLOYD DIXON ET AL., THE NATIONAL FLOOD INSURANCE PROGRAM'S MARKET PENETRATION RATE 71–73 (RAND Corp. 2006), *available at* http://www.rand.org/pubs/technical_reports/2006/RAND_TR300.pdf (finding slight relationship between floodplain enforcement and disaster assistance under one model, but not others). Fortunately, the political response to Katrina has provided a natural experiment along these lines. Congress has authorized direct payments to homeowners who declined to purchase flood insurance in an amount equal to the benefits to which they would have been entitled had they done so. At $150,000 per claimant, this amount dwarfs previous post-disaster relief by more than an order of magnitude. (It is also smaller than the maximum $250,000/structure, $150,000/contents available through the NFIP, but is almost exactly the average NFIP policy value. *See* DIXON ET AL., *supra* note 27, at 27). The near-absence of public debate on this topic goes some way toward explaining why the NFIP is both a failure on its own terms and a systematic deterrent to the re-emergence of a private flood insurance market—whatever motivated the purchase decisions of prudent pre-Katrina homeowners, it is difficult to imagine they will not draw some rather obvious lessons about the credibility of NFIP's implicit requirement that one actually purchase insurance ex ante.

while certainly catastrophic for victims, do little to upset the balance of a finely-tuned risk pool. Losses due to flood, earthquake, or windstorm, however, tend to be highly correlated within geographic areas. That is, if A's house is lost to flood, it is extremely likely that B's house, located nearby, has been exposed to the same forces. Although seemingly random distributions of misfortune in post-disaster areas are hardly uncommon, these misfortunes are much more closely correlated than is the case with non-catastrophic events.

This introduces a problem that is more complex than it first appears. Insurers modeling loss exceedance probabilities do not simply raise premiums to reflect the higher average risk for correlated losses; correlation itself induces greater variability in losses, leading to significantly higher premiums (assuming insurers do not avoid underwriting altogether).[28] Moreover, the economic structure of modern insurers attempts to cabin geographically correlated losses as narrowly as possible. For example, although major insurers nominally remain in regularly inundated states such as Florida and Louisiana, these are subsidiary operations only. In theory, if losses exceed the insurer's "pain threshold," there is no claim to the assets of the parent corporation (a distinction insurers do not underscore in their advertisements).[29]

Combined with the adverse selection problem noted above (Midwesterners, for example, do not purchase earthquake insurance), the result is that private catastrophic risk management in practice has lost a good deal of its portfolio character; underwriting losses in one region are not as easily offset by operational or investment gains elsewhere. Insurance companies correctly point out that they cannot be expected to use profitable lines of business to subsidize unprofitable ones, and in the absence of aggressive (and probably counterproductive) rate regulation, they will not.[30]

---

28. N. Scott Arnold, *The Role of Government in Responding to Natural Catastrophes*, J. DES ECONOMISTES ET DES ETUDES HUMAINES 10 (Dec. 2000), *available at* http://media.hoover.org/documents/0817928022_1.pdf, at 14–15.

29. Florida recently took the unusual step of prohibiting national insurers from forming new subsidiaries so as to limit their exposures. *See* Staff Analysis for House Bill 1A CS Hurricane Preparedness and Insurance (on file with author). I generally favor restricting corporations from limiting their liabilities through the entirely unpersuasive fiction that wholly-owned subsidiaries are "independent." However, I am skeptical that a rule which permits "granddaughtering" of previously-established subsidiaries provides consumers with substantially more protection against insurer insolvency.

30. Insurers frequently describe the property/casualty coverage in hurricane-prone states as unprofitable. This observation needs to be unpacked somewhat. In some states, homeowners lines have been unprofitable; insurance industry critics prefer to focus on aggregate data, and on that score, the property and casualty insurance business remains very attractive indeed. Nevertheless, insurance operates on a global scale, and capital will naturally move to places of maximum profitability. Given the instability of certain insurance markets and insurers' increasingly sophisticated techniques for segmenting operations and investment therein, all that is required is that these lines be *somewhat* less profitable for substantial capital outflows to occur. That condition is amply fulfilled by homeowners insurers' loss experiences during the past decade.

Moreover, I think it is very questionable to demand that insurers cross-subsidize lines of business, as a number of commentators have suggested, directly or otherwise. The fact is that capital markets will perform this function even if insurers are debarred from doing so (by reallocating capital away from overly exposed businesses). Moreover, simple appeal to the risk-spreading function of insurance does not provide an argument as to why automobile drivers in, say, Minnesota, have a responsibility, qua

B. Governmental Failure

Proponents of the NFIP recognized the inefficient and ad hoc character of post-disaster assistance. By creating an insurance market, they hoped to induce would-be recipients of aid to pre-fund their assistance. Consumers, however, were not the only intended target of the NFIP.

Land use planning has remained an almost exclusively local concern, despite the obvious transjurisdictional effects of local decisions.[31] NFIP-backed insurance was conceived of as a way of inducing communities to adopt flood mitigation policies that the federal government—even at the height of the Great Society—could not compel.[32] Citizens would not be eligible to purchase flood insurance if their communities did not participate in the NFIP. In theory this would motivate communities to remain compliant, because their citizens would correctly value the benefit of access to flood insurance and demand appropriate action from governmental officials.

Governments, like individuals, are subject to many of the cognitive biases that constrain the development of private catastrophe insurance. They are entirely capable of betting substantial amounts of their welfare (and that of others) on the long-term absence of catastrophe. Immediate and often mundane needs frequently take priority over seemingly more esoteric and remote risks such as floodplain management.[33] For example, virtually none of the failures that occurred during Katrina were unusual or unforeseen. Two years earlier, New Orleans had been specifically warned that over 100,000 people would be unable to flee the city unassisted in the event of catastrophe.[34] The fractured and ineffective management of interdependent levees along the river has been long understood. No resident of New Orleans could be surprised that pumping stations installed in *1915*, and which cannot reliably counter a summer thunderstorm, would fail

automobile drivers, to subsidize homeowners in Mississippi. As I argue below, there is a political and pragmatic basis for subsidy, and history suggests it is inevitable. But that basis may not be found in the misfortune some policyholders may have in doing business with an insurer that also writes high-risk insurance policies. Nothing in the concept of insurance requires inter-class subsidies; whether to do so is a policy and political choice that balances competing visions of what insurance ought to do.

31. In an ironic reprise of the shameful lifeboat mentality of New Orleans during the 1927 Mississippi River Flood (in which New Orleans business interests, with the concurrence of the state, dynamited levees protecting the adjacent and relatively poor Plaquemines Parish in order to avoid putting New Orleans at risk), a Missouri task force concluded that Missouri's decentralized system of floodplain management "'invite[d] levee wars—a situation where each community . . . is encouraged to continue building his levee higher and stronger in order to protect his interest and ensure river water flows elsewhere . . . . But by everyone adopting this strategy, the aggregate result appears to actually increase the flood danger by increasing the height and velocity of the river flow during floods.'" Davidson, *supra* note 10, at 387 n.145.

32. King, *supra* note 7, at CRS-19; Burby, *supra* note 4, at 8–10.

33. Burby, *supra* note 4, at 9 (citing DENNIS S. MILETI, DISASTERS BY DESIGN: A REASSESSMENT OF NATURAL HAZARDS IN THE UNITED STATES 160 (Joseph Henry Press 1999); Peter J. May, *Addressing Public Risks: Federal Earthquake Policy Design*, J. OF POL'Y ANALYSIS & MGMT. 10, 263–85 (1991)).

34. Jonathan Walters & Donald F. Kettl, *The Katrina Breakdown*, *in* ON RISK AND DISASTER: LESSONS FROM HURRICANE KATRINA 258 (Ronald J. Daniels, Donald F. Kettl & Howard C. Kunreuther eds., 2006).

when all public systems have been inundated during a hurricane.[35] Then again, maintaining a sinking metropolis that sits several feet below sea level is perhaps the ultimate faith-based initiative; these failures are surprising only in their capacity to shock.

The NFIP was intended to change this by building incentives for forward-looking floodplain management. After a slow start, over 20,000 communities have come to participate.[36] There can be little question that the NFIP has regularized the process of federal and state partnership in floodplain management. However, while local communities appear to be doing more, pre-Katrina insured flood losses have crept up to an average of $1.2 billion a year.[37] In one sense, the NFIP was a victim of its own success, as floodplain management (rather than floodplain abandonment) encouraged development and, thus, concentrated rather than dispersed economic risks of flooding. Moreover, the NFIP's enforcement mechanisms are limited and not credibly invoked. For years, approximately 1% of NFIP-insured properties have accounted for nearly 30% of all NFIP losses (which is only a fraction of total flood losses, as explained below).[38] No private insurer would tolerate the blatant moral hazard at work here, and it is hard to know whether one should be astonished more by the shameless refusal of NFIP participants to rebuild or relocate so as to minimize risk or by the incompetent bureaucracy that continued to tolerate it.[39]

1. Program Structure and Evolution

The NFIP has been something of a bureaucratic nomad. Originally located in the Department for Housing and Urban Development, it migrated to FEMA and was most recently rolled into the Emergency Response and Preparedness Directorate, colloquially known as Homeland Security. While flooding has undeniable impacts on housing and emergency preparedness, none of these are obvious locations for a public

35. *See* DOUGLAS G. BRINKLEY, THE GREAT DELUGE: HURRICANE KATRINA, NEW ORLEANS, AND THE MISSISSIPPI GULF COAST 130–31 (Harper Collins 2006). Brinkley suggests that properly-manned pumps (they were abandoned, along with the rest of New Orleans government during the storm) could have reduced the damage in some areas. Other accounts have attributed the failures to capacity, mechanical breakdown, and a lack of electricity. Undeniably, these essential systems lacked the redundancy that is required of any intelligently designed emergency system.

36. U.S. GENERAL ACCOUNTING OFFICE, GAO-03-606T, FLOOD INSURANCE: CHALLENGES FACING THE NATIONAL FLOOD INSURANCE PROGRAM 3 n.1 (Apr. 2003), *available at* http://www.gao.gov/cgi-bin/getrpt?GAO-03-606T [hereinafter GAO FLOOD INSURANCE] (statement for the record by JayEtta Z. Hecker, Director of Physical Infrastructure).

37. FEMA, Loss Dollars Paid by Calendar Year: 1978–2005, www.fema.gov/business/nfip/statistics/cy2005lsdl.shtm (last visited Jan. 18, 2007) (average annual loss from 2000–2004).

38. King, *supra* note 7, at CRS-20.

39. FEMA—of which NFIP is a somewhat incongruous part—is an easy target in the wake of Katrina. The NFIP's failures are perhaps best understood not as those of a rogue agency untethered to proper political oversight, but rather one that reflects the political environment only too well. Few economists would sanction the NFIP's inconsistent and counterproductive signals to consumers and communities. But then, few economists can be fired for overzealousness as the result of a phone call from a displeased member of Congress.

insurance company. Assessments of NFIP have pointed to its difficulties in competing for resources within differently missioned bureaucracies.[40]

a. The WYO Program

Initially, flood insurance was written through an NFIP consortium of private insurers, but the program was plagued by mismanagement and complexity. NFIP then directly provided insurance to the public, but, as we shall see, the government is not a very good insurance company and this, too, was terminated. In 1983, the NFIP mutated again into a public-private partnership wherein private property insurers (primarily homeowners) would market flood insurance, but the actual underwriting—risk distribution—was done by the NFIP. In essence, private insurers would function as agents of the federal insurance scheme.

This arrangement is known as the Write-Your-Own ("WYO") program, though that title is misleading. The insurance contract is written by the NFIP and published in the Federal Register. No deviations are permitted, and it is not governed by the law of insurance contracts generally. Insurance companies retain 30% of premiums as a commission and receive compensation for additional loss-adjustment expenses.[41] These insurers are responsible for enrolling policyholders, collecting premiums, and administering claims. In a number of respects—not all intended by Congress—they resemble the administrators of ERISA plans: Private insurers who wear one hat while fulfilling their own policy obligations and wear another when they function as agents of the ERISA fiduciary. Similarly, WYO insurers have been described as "fiscal agents" of the federal government, a denomination that permeates their legal relationship to policyholders.[42]

The WYO program seemed an ideal way to remedy the NFIP's persistent failure to sell many flood policies. Private insurers are presumably more motivated and adept at selling insurance than the federal government. But WYO was neither the first nor the last strategy so employed. In fact, the inception of the WYO program had a very modest impact on flood insurance participation.[43] Measuring NFIP participation with respect to the most at-risk communities is surprisingly difficult, and rates vary regionally and within affected areas. A series of studies undertaken during the past decade has produced widely-divergent results; neither FEMA nor the Office of the Comptroller of the Currency[44] can reach consensus on the level of NFIP participation. Official estimates have ranged from 16% and 33% overall to approximately one-half of homes subject to mandatory

40. GAO FLOOD INSURANCE, *supra* note 36, at 3.

41. King, *supra* note 7, at CRS-10.

42. 42 U.S.C. § 4071 (a)(1) (2006).

43. *See* FEMA, Total Policies in Force by Calendar Year, http://www.fema.gov/business/nfip/statistics/cy2005pif.shtm (last visited Jan. 18, 2007) (showing modest increase in PIF during the 1980s).

44. The OCC has a jurisdictional interest in flood insurance because of a series of steps taken by Congress with a view toward linking mortgages and flood insurance. The efficacy of those efforts remains in question. *See* DIXON ET AL., *supra* note 27.

flood insurance requirements.[45] The most comprehensive public study to date estimates that approximately one-half of homes most at risk are insured against flood.[46] The estimated take-up rate rises to as high as 80% for homes subject to mortgages originated after 1994,[47] but there is substantial regional and data quality variation that make precise assessments impossible. For example, fewer than one-in-ten residents along the Gulf Coast of Mississippi are believed to have held flood insurance prior to Katrina.[48] In the South generally, participation has been estimated at 61%.[49] However, in New Orleans, a combination of substantial poverty and the exemption from flood purchase requirements stemming from the (failed) levee system suggest lower participation.[50] Overall, there are approximately 5.3 million policies representing $874 billion of insurance in force,[51] although there are at least twice as many homes located in areas of highest flood risk.[52] For several reasons, this is a mystery.

b. Subsidy

Insurance is a curiously retrospective business; only by examining the past does it prepare estimates of the future. Calculation of risks requires a set of data describing the external world and policy language enumerating the subset of events for which coverage is offered. Insurance is not the most difficult of businesses to get into if one follows in the footsteps of others, as most do. However, it is a very difficult business to originate. This was the quandary faced by the NFIP at its inception: How to price a product no one had sold for thirty years, such that consumers would actually purchase it and the pool would remain solvent?

The problem was that there simply was no data at hand immediately translatable into an insurance rate structure;[53] if there had been, many consumers likely would have been priced out of the market. The NFIP's

45. GAO FLOOD INSURANCE, *supra* note 36. Throughout this Article, I use terms such as "high risk" to refer to homes located within a 100-year floodplain; such areas are denominated "Special Flood Hazard Areas" ("SFHA"). A home located in such an area would receive an NFIP rating of "SFHA A," denoting highest risk, absent flood-mitigation efforts such as elevation or a levee. It is this designation that triggers the mandatory insurance requirement for mortgaged properties.

46. DIXON ET AL., *supra* note 27, at xvii.

47. KEVIN F. MCCARTHY ET AL., THE REPOPULATION OF NEW ORLEANS AFTER HURRICANE KATRINA 19 (RAND Corp. 2006).

48. Richard Scruggs, Remarks at *Hurricane Katrina: A Legal Symposium*, Mississippi College School of Law (Aug. 29, 2006).

49. MCCARTHY ET AL., *supra* note 47, at 43.

50. Editorial, *Rethinking Flood Insurance*, WASH. POST, Sept. 21, 2005, at A22.

51. FEMA, Total Coverage by Calendar Year, http://www.fema.gov/business/nfip/statistics/cy2005cov.shtm. (last visited Jan. 18, 2007). This is a 13% increase since Hurricane Katrina, the second-biggest gain in policies in force since 1979. Direct underwriting began in 1978.

52. MCCARTHY ET AL., *supra* note 47, at 18.

53. This is an excellent illustration of how insurance "maps" our understanding of the world. Because for decades no one wrote flood insurance policies, there was no economic structure in place to assure the generation of information about flood risks. Unlike auto accident or fire risks, insurers have not directly faced financial consequences for failing to correctly predict the path of flooding. Absent such consequences, insurers have no particular interest in academic hydrological exploration. The problem that has long bedeviled the NFIP is that no one else does either.

solution was to subsidize policies within the pool of flood insurance consumers[54] while undertaking to create the required data. These subsidies are substantial and reach deep into the risk pool. On the theory that pre-NFIP homes were neither constructed nor priced with flood risk in mind, such homes were "grandfathered" into eligibility for subsidy. The NFIP estimated that the turnover in housing stock would require premium subsidies for twenty-five years. As of this writing, 38 years have passed, and approximately 28% of NFIP policies remain subsidized. This in fact reflects substantial progress, as the subsidization rate was originally 70%.[55]

c. *Accounting*

The NFIP uses a cash-based method for accounting and determining premiums.[56] The program is not set up to generate significant loss reserves to be used in "bad years." Instead, total premium income is preset annually to match a moving twenty-five year average annual loss experience. Within that "cap," premiums vary by risk and the grandfathering rules described above. This results in two interesting phenomena, one of which undermines public confidence in the NFIP while the other undermines the foundations of the program.

First, the finances of the program have oscillated significantly, swinging from deficit to surplus each year.[57] The NFIP has statutory borrowing authority, and claims continue to be paid in deficit years. However, this does not create the appearance that the NFIP is on sound financial footing. For example, when 155,000 claims were filed in September 2005, the NFIP temporarily ran out of money and reached the limit of its borrowing authority. Although claims were ultimately paid, such embarrassments do little to instill public confidence in the NFIP.

The other problem with this type of insurance accounting is actual unsoundness. Cash-based (rather than accrual) budgeting significantly understates the true liabilities of the system. Recall the pattern of increasing flood losses throughout the 1990s to the present. A moving average exposure does not provide an accurate picture of likely exposure today. Moreover, much of the rise in the NFIP's insurance in force can be explained by real estate appreciation rather than an expanding claims base. In other words, the portfolio of claims is becoming riskier simply by virtue of its

54. That is, while substantial, the NFIP subsidy does not create a direct charge to the Treasury; non-subsidized policyholders pay higher-than-required rates so that others within the pool may pay rates lower than they would otherwise be charged. Pasterick, *supra* note 17, at 134. *Cf.* King, *supra* note 7, at CRS-16 Table 1 (noting that NFIP deficit borrowings were forgiven by congressional appropriation through 1985). This observation loses its force when one considers the historical swings in NFIP finances; after a flood loss, there was no requirement that the collecting insured remain in the risk pool so as to eventually "pay back" some of the claim in the form of increased premiums. In 2005, for example, the NFIP paid over $16 billion in Katrina-related claims—more than it had paid in the entire history of the direct-underwriting program.

55. King, *supra* note 7, at CRS-15.

56. GAO FLOOD INSURANCE, *supra* note 36, at 5–6.

57. *See* King, *supra* note 7, at CRS-16 Table 1.

constituent homes becoming more expensive. Moreover, cash-basis accounting masks other changes in meteorological and residential patterns that create higher-than-experienced flood risks. The upshot is that none of the prices charged to NFIP policyholders—including the unsubsidized ones—reflect a realistic picture of their risk.

C. *The Missing Monitor*[58]

None of these features explain why so few homeowners choose to purchase flood insurance. Given that it is both intentionally and unintentionally subsidized, it is an excellent deal for most and a steal for others; flood insurance should be very popular indeed. Of course, the dynamics described above that constrain the native demand for catastrophe risk help explain this phenomenon. But they do not explain the apparent failure of private insurers to create demand.

Private insurers are merely agents of the NFIP; by writing policies they incur no underwriting risk whatsoever. Moreover, they receive significant commission payments and full compensation for loss-adjustment expenses. In light of this, private insurers should be highly motivated sellers of flood insurance, but they are not. Various reasons have been advanced to explain this failure, including insurance agents' continued unfamiliarity with flood insurance and the asserted complexities of writing policies. None of these explanations are persuasive. For some reason, the insurance industry is simply not interested in helping the federal government achieve greater market penetration of flood insurance—an assistance that is by no means required without compensation. Presumably, private insurers find marketing flood insurance rather than their own underwritten products relatively less profitable and, therefore, direct their limited marketing resources toward the latter. However, this failure is at present an unsolved puzzle.[59]

The mystery deepens when one considers the full range of incentives that ought to direct purchase decisions. Approximately 65% of owner-occupied homes are financed with, or subject to, long-term mortgages.[60] Mortgagees have a strong interest in the preservation of pledged property,

58. A gentle reminder to Professors Baker and Griffith of the perils of circulating drafts with catchy titles. *See* Baker & Griffith, *supra* note 6.

59. Another, more conspiratorial possibility is that insurers do not wish to depress demand for private homeowners coverage by loudly proclaiming the importance of flood insurance. If flood insurance is so important, some consumers might say, then why is it not included in the standard homeowners policy? Or insurers might fear that underscoring flood risks may deter consumers from purchasing homes in flood-prone areas (thus depriving insurers of the opportunity to sell their own policies).

60. DIXON ET AL., *supra* note 27, at 22 (citing Richard J. Tobin & Corinne Calfee, *The National Flood Insurance Program's Mandatory Purchase Requirement: Policies, Processes, and Stakeholders*, AMERICAN INSTITUTES FOR RESEARCH (2005)). The RAND report estimates that 80–90% of high-risk homes are subject to mandatory flood insurance purchase requirements, with a compliance rate that ranges from 67% to as high as 80% nationwide (because the relevant datasets have been compiled for diverse purposes and vary in quality, there is no conclusive determination of compliance available). *Id.* at 23–24. However, NFIP penetration for homes not subject to the purchase requirement (either because there is no federally regulated mortgage or the home is located in what is presently considered an area of lower flood risk) may be as low as 18%. *Id.* at 25. Overall, only about one-half of high-risk homes carry flood insurance. *Id.*

which is why they insist on sufficient homeowners protection before closing. This is a successful example of insurance-as-governance. Suppose that public policy required people to maintain homeowners coverage (recall, this is a primary source of liability protection as well). It turns out that the need for such a law is limited, for only persons who have paid off their mortgages will avoid the intrusive gaze of the risk-sensitive mortgagee. Today, no bank would consider offering a mortgage without a basic homowners policy in place, which automatically provides payment to the mortgagee first in the event of loss.[61] Currently, 96% of homeowners carry homeowners insurance.[62] In theory, no bank should be writing mortgages in flood-prone areas without insisting on the purchase of flood insurance. No law should be necessary, for surely financial institutions are immune from the faulty heuristics that inhibit individuals from planning for catastrophe, no?

No, indeed. Congress has twice found it necessary to legislate incentives for the banking industry to act in its own interest, and thereby save the federal treasury from post-disaster demands. In 1973, federally backed mortgages required flood insurance where appropriate, and in 1994 this requirement was significantly expanded to include all federally regulated banks.[63] This is undoubtedly a good idea, but two questions naturally arise. Unfortunately, the available evidence provides unsatisfactory answers.

The first question is why are such measures needed? An individual who forgoes insurance is placing a bet that the insured casualty will not occur. This is often mistaken, but one can perceive the outlines of a widely-held sentiment about "paying for nothing."[64] How can supposedly sophisticated institutions make similar bets—bets that *will lose* across a portfolio of mortgages?[65]

One explanation is the principal-agent problem. There is approximately a 26% chance that a 1-in-100 flood will strike a home during the lifetime of a 30-year mortgage. Several things have to go wrong for an optimistic bank's flood bet to go sour. First, there has to be a flood that significantly impairs the property such that the insured is likely to consider abandonment. Second, the amount of loss, together with the insured's income, must make recourse against the homeowner financially unrewarding for the mortgagee. But the real problem is that these events must occur on the relevant manager's "watch"; that is, they must occur within a time horizon and organizational structure that makes it feasible for the institution to

61. Presumably, most homeowners will correctly recognize the value of insurance on their own, though the dynamics described above are certain to result in less demand absent compulsion.

62. Ins. Info. Inst., Homeowners Insurance, Facts and Statistics, http://www.iii.org/media/facts/statsbyissue/homeowners/ (last visited Jan. 18, 2007).

63. GAO FLOOD INSURANCE, *supra* note 36, at 10.

64. As an insurance professor, it has often fallen to me to explain to intelligent people that the absence of a loss does *not* imply that one has received "nothing" in exchange for an insurance premium. But inchoate risk lacks the salience of a car accident that actually materializes, and this accounts for no small part of public skepticism regarding insurance.

65. In the aggregate, the gains presumably exceed the occasional catastrophe. But a bank holder of mortgages that screened for flood risk/coverage ought to enjoy a competitive advantage that would express itself as higher gains relative to those that did not manage this risk.

attribute responsibility to the poorly betting actor. Faced with a choice between immediate credit for generating mortgages today and a potential problem that may crop up tomorrow when someone else is responsible, rational agents will sell out their principals more often than not.[66]

But this is not the only alternative available. It is even more attractive to persuade others to take risks off your hands. And, beginning about the time the NFIP came online, this is precisely what mortgagees began to do. A mortgage is generally the longest-termed financial instrument one can hold. The risk for a bank is that a shift upwards in interest rates during the life of the mortgage leaves the bank's capital in a less profitable position because it has been expended to support the mortgage. This tends to make banks hesitant to offer mortgages, and in the high-interest 1970s the federal government created Fannie Mae to enable a secondary market in mortgages to arise. Most residential mortgages are sold within a few months of origination, packaged along with thousands of others, and creatively exfoliated in every way imaginable. In return for cash, the originator conveniently includes the uninsured risk of catastrophic loss at no additional charge.

Mortgage servicing facilities monitor homeowners' compliance with insurance requirements, and this can extend to flood insurance as well. However, there is some evidence that insureds required to purchase flood insurance often fail to renew;[67] for some reason, the compliance mechanism for ordinary coverage does not work as smoothly with respect to catastrophic risks. The secondary market provides one explanation, albeit partial, as to why.[68]

66. During the mortgage-refinance boom of late, a curious trend was discerned: Valuations generated by appraisers for mortgage companies tended to be reliably higher than market-based measures. In theory, mortgage companies should have no problem weeding out unduly optimistic appraisers. In practice, it is precisely that quality that commends them to mortgage company personnel—who can thereby write higher mortgages. Should reality one day intrude (for example, in the collapse of a real estate bubble), the responsible parties are long gone, perhaps with the wind of commission-generated performance bonuses at their backs. A rather technical summary of relevant research published just prior to the recent boom may be found in George H. Lentz & Ko Wang, *Residential Appraisal and the Lending Process: A Survey of Issues*, 15 J. OF REAL EST. RES. (1998).

67. Kunreuther, *supra* note 4, at 179.

68. Inferential support for this "hot potato" theory is provided by surveys of California mortgage originators. Only 13% of California homes have earthquake insurance. Why do banks not insist on it as a continuing condition of the mortgage? Because those mortgages will be sold, and the earthquake risk along with them. Risa Palm, *Demand for Disaster Insurance: Residential Coverage*, *in* PAYING THE PRICE: THE STATUS AND ROLE OF INSURANCE AGAINST NATURAL DISASTERS IN THE UNITED STATES 57 (Howard Kunreuther & Richard J. Roth eds., 1998).

A colleague familiar with the secondary mortgage market is skeptical of this explanation. He points out that purchasers of CMOs have access to impressive amounts of data that should permit them to track flood insurance compliance and participation rates in bundled mortgages. Thus, holders of poor flood bets should not be able to easily pass them along to others.

I am unaware of research bearing directly on the plausibility of my thesis, but the truth may lie somewhere between these two intuitions. It turns out that data quality in the secondary mortgage market is a longstanding concern, though it is slowly being addressed. Error rates among mortgage lenders have been estimated at 5–14%, which implies millions of unique data errors each year throughout the secondary market. *See* Joseph Smialowski, *The Cost of Bad Data and Bad Technology*, MORTGAGE-TECHNOLOGY.COM, Feb. 20, 2007, http://www.mortgage-technology.com/plus/perspectives/. Because flood insurance is a highly mutable characteristic of a property subject to mortgage, this data

To what extent is this occurring, even in the post-1994 era of required flood insurance? The accounts are conflicting, and the most comprehensive public study to date cannot decisively resolve the question. The RAND Corporation reports that post-1994 mortgages are much likelier to involve flood insurance (if required).[69] However, that the compliance rate is significantly less than 100% is unquestioned. This is a modestly surprising failure of the market. It does provide in microcosm two important points: The current structure of the NFIP does not sufficiently incentivize private action to mitigate flood losses, and private actors have the capacity to offload catastrophe risk onto others, further diminishing their incentives to control it.[70]

---

point is more susceptible to erroneous recording. Moreover, there is a tradeoff between data integrity (consistently and correctly ascribing to a collateralized mortgage its characteristics) and data granularity (the specificity of that characterization). *Id.* The current state of the art in mortgage data technology covers an astounding 3000 data points (including flood insurance), and this only captures 85% of the mortgage life cycle. *Id.*

Past-due mortgage loans in the Gulf skyrocketed after Katrina, creating the expectation that actual defaults would rise as well. John Waggoner, *Mortgages Go Unpaid in Storm-Hit Areas*, USA TODAY, Sept. 29, 2005, at 3B. However, Dominion Bond Service reported that Katrina-affected areas represented less than 1% of rated loan pools and involved smaller-than-average loans. Nicholas Yulico, *Home Lenders Shake Off Katrina*, THESTREET.COM, Sept. 12, 2005, http://www.thestreet.com/_tsclsii/funds/nicholasyulico/10242195.html.

The upshot is that flood insurance participation is likely to be an extraordinarily modest factor in the pricing of bundled mortgages, unless those bundles are concentrated in flood-prone areas. Moreover, even if such participation is fully accounted for in price (e.g., relatively nonparticipating portfolios incur a risk premium in the form of lower selling prices), this financial markets signal is awfully distant from the loan officers, home purchasers, and land use authorities who might theoretically make use of it.

69. One unfortunate way in which the conceptual identity between government risk mitigation and insurance expresses itself is the prompting of the governmentally protected to forego insurance altogether, which can be seen in New Orleans. The levee system qualified as a "flood control device" so as to remove at-risk homes from their natural designation requiring flood insurance (after 1994). Even apart from this under-enforced legal constraint, the existence of the levees also contributes to a norm of apparent safety. A natural response to this norm is to forego flood insurance altogether (although, ironically, it would be extraordinarily inexpensive in a levee-protected area). This response, entirely foreseeable, led to disaster when the levee at the 17th Street Canal ruptured, inundating thousands of homes.

70. A recent paper describes the practice among U.K. mortgage lenders to arrange "block policies" with preferred insurers that commit the insurer to underwrite flood risk for any property referred to it. However, this system has recently been subjected to "proverse selection," in which good risks are enticed by nonparticipating flood insurers. David Crichton, *Flood Risk and Insurance in England and Wales: Are There Lessons to Be Learned from Scotland?* (Benfield Hazard Research Centre, Technical Paper No. 1, 2005), *available at* http://www.benfieldhrc.org/activities/tech_papers/tech_paperl/flood_risk_and_ins_Mar05.pdf.

During a workshop presentation, a questioner suggested that the problem of noncompliance could be addressed by requiring proof of flood insurance (where needed) as a condition of participation in the secondary market. This idea has the attractiveness of delegating regulatory oversight to what ought to be a risk-sensitive entity—Fannie Mae. In fact, mortgages purchased by Fannie Mae are subject to the 1973 legislation requiring federally regulated lenders to ensure coverage for flood-prone properties. *See* DIXON ET AL., *supra* note 27, at 1. However, one must recall that insurance does not "run with the land," and mortgage obligations have a life of their own. This mechanism thus cannot ensure that, once securitized, risky mortgages remain insured against flood.

IV. Socializing Losses, Privatizing Profits

Private insurance markets tend to externalize costs at the expense of a robust system of loss redistribution. Birny Birnbaum has evocatively described the "hollow[ing] out" of private insurance policies;[71] insurers have excluded losses that would have been covered in earlier years (such as earthquakes, floods, hail, and windstorm). I have observed elsewhere that insurance law has yet to work out a completely satisfactory theory that defines the conditions when insurers may validly exclude certain events from coverage, yet avoid the label Birnbaum believes already describes homeowners insurance: "defective products."

That theory must await another day, but it is important to outline the present dynamics as they relate to flood insurance. Insurers believe that they have insulated themselves from flood losses; I believe they are mistaken.

A. *The Insurance Construction Cycle*

"The insurer proposes, but the court disposes." Such was the view within the insurance industry a century ago, and little has changed to alter this fact. Insurance contracts have always been subject to interpretation and revision; early insurance contracts were astoundingly vague, often to the detriment of insurers. Through redrafting, insurers learned to more carefully define the scope of risks they understood the contract to allocate to them. However, insurance language evolves over a very long time; there are significant transaction costs involved in revising policies. An insurer with a bright idea for a more finely tailored provision may be unwilling to risk the possibility that it will have guessed incorrectly, thus saddling itself with more liability than its conservative competitors. For this reason, the development of policy forms has largely been centralized within the Insurance Services Office ("ISO").

Exclusions are not limited, however, to more precise statements of what the insurance is. Insurers have demonstrated a rather consistent tendency to seek exclusion for unpleasant casualties that would ordinarily be understood to fall within the scope of coverage. Like many things, this dynamic has both an innocent and a sinister interpretation. The sinister view is that insurers are merely "hollowing out" coverage whenever they get the chance, thus depriving consumers of some irreducible minimum level of fair protection. Examples that have particular resonance today, as we shall see, were the practices of excluding from accident coverage any events in which disease played a role or accidents occasioned by the insured's negligence. A moment of reflection will disclose to the reader that there are many such cases, yet they are events for which consumers reasonably expect coverage.

71. *See* Letter from Birny Birnbaum, Executive Dir., Ctr. for Econ. Justice to David Parsons, Deputy Comm'r, State of Ala. Dep't of Ins., Proposal for NAIC Personal Lines Regulatory Framework (July 14, 2006) (on file with the *Mississippi College Law Review*).

B. *Insurance Risk Allocation and Market Segmentation*

Consider the sudden emergence of mold exclusions in the 1990s. At one point, insurers were paying $3 billion annually for mold claims (which were quite novel).[72] Allocating the risk of *legal claim uncertainty*—the possibility that notions of "damages" or "wrongs" will evolve somewhat faster than insurance contracts—poses a difficult problem. The insurance contract may profitably be understood as allocating these "meta-risks" as well as the obvious risks, though this tests the contract-based underpinnings of classical insurance law. Depriving homeowners of mold coverage simply because insurers (who are in a superior position to monitor patterns of claiming and liability) did not foresee such claims is problematic.

However, it is less so when exclusions take on a market-segmenting character. Market-segmenting provisions are designed to force consumers to purchase insurance specifically tailored to events with patterns or risk profiles that distinguish them from the basic insurance policy. Two well-known examples are product liability claims (generally excluded by the standard commercial general liability policy) and automobile claims (generally excluded by the standard homeowners policy). These liabilities are ratably distinct from the sorts of claims to which homeowners and businesses are typically subject. To avoid adverse selection, insurers properly exclude them from coverage, leaving it to the policyholder to seek separate coverage— perhaps from the same insurer—such as completed-products coverage or automobile insurance.

Market segmentation works well when there exist clear factual and legal borders between different types of claims. Moreover, this border must be *described* with precision. Otherwise, consumers may characterize their claims for purposes of maximizing insurance coverage for a particular event as it occurs. Just as importantly, consumers may be genuinely perplexed about precisely what coverage they have purchased.

Market segmentation has in practice proven difficult, particularly in the homeowners context. Homeowners policies are particularly susceptible to policyholder arbitrage because they offer several different kinds of coverage for types of losses that often share a common nucleus of operative facts. Insurers use several strategies to discipline the claim construction process, but for over a century they have relied on various policy conditions addressing causation. This process reached its conclusion with the evolution of anti-concurrent causation ("ACC") clauses. By their terms, ACC clauses exclude coverage where a non-covered peril contributes in some way to the loss. The concept is not new; insurers have used similar phrases since the nineteenth century. However, a series of decisions during the 1980s in California and Washington put pressure on insurers to describe with particularity their intent to opt out of what emerged as a default rule of interpretation: If there is a covered cause, there is some coverage—and

72. ROBERT HARTWIG & CLAIRE WILKINSON, MOLD AND INSURANCE 3 (INS. INFO. INST. 2003), *available at* http://server.iii.org/yy_obj_data/binary/735870_1_0/Mold.pdf.

potentially, a great deal of it—notwithstanding the presence of uncovered causes.[73] ACC clauses were written to deal with this problem, but instead demonstrate that it is possible to fail by succeeding too well.

In a future article, I will explore more fully the role that causation has played in the interpretation of insurance contracts. For present purposes, the issue may usefully be explored by examining the set of cases pending in Mississippi in the wake of Katrina.

C. *Anti-Concurrent Causation*

Insurers either use an ISO-derived ACC clause or devise their own. Although some policies are more specific with respect to excluded perils, the variation among ACC clauses themselves is generally not material. State Farm's Mississippi homeowners form provides, in relevant part:

> We do not insure under any coverage for any loss which would not have occurred in the absence of one or more of the following events. We do not insure for such loss regardless of: (a) the cause of the excluded event; or (b) other causes of the excluded event; or (c) whether other causes acted concurrently or in any sequence with the excluded event to produce the loss . . . [.][74]

This point is amplified and given more precise instantiation with respect to water damage in the standard homeowners policy, as well as the windstorm policy which is a separate coverage in Mississippi and some other southern states. Other provisions commonly found among ISO policies and their variants reinforce this idea. Read literally, the clause eliminates coverage wherever water acts alongside a covered peril such as wind. Unsurprisingly, the leading authorities emerging from Hurricane Katrina decline to do so.

In gracious correspondence with the author, one of the drafters of the ACC (a senior officer with State Farm) pointed out that it has been widely upheld. State Farm and other insurers have made the same claim in briefs filed throughout the Katrina litigation. While true, this overlooks the particular evil the ACC was designed to eliminate: The judicially-created uncertainty regarding the border between earth movement and other perils such as explosion or negligent construction.[75] An insurer undertakes to cover explosions due to earthquake (such as a ruptured gas main) because it would be patently ridiculous to describe a house consumed by fire as not having been lost due to fire simply because the fire was antecedently caused by an excluded peril. The problem arose when courts construed

---

73. Stephen P. Pate, *Recent Developments in Property Insurance Law*, 33 TORT & INS. L.J. 659, 663 (1998).

74. Tuepker v. State Farm Fire & Cas. Co., No. 1:05CV475, 2006 WL 1442489, at *2 (S.D. Miss. May 24, 2006).

75. *See, e.g.*, Garvey v. State Farm Fire & Cas. Co., 770 P.2d 704 (Cal. 1989); Graham v. Pub. Employees Mut. Ins. Co., 656 P.2d 1077 (Wash. 1983).

"explosion" to refer to the underlying earth movement itself, an act of judicial sophistry that has few parallels. No one but a homeowner lacking earthquake insurance would think to describe such a loss as a covered "explosion" as that term is conventionally understood. It is unsurprising that many of the cases upholding the ACC—upholding the right of the insurer to specify coverage defined outside of the general rule of proximate causation—have in fact arisen in the context of earth movement.

In the Katrina cases, the issue is more complicated. Hurricane Katrina resulted in several distinct types of losses, not all of which, it appears, can be reliably distinguished after the fact. A rough taxonomy of catastrophe would include: Homes apparently washed away by the surge of the Gulf Coast or nearby bodies of water; homes damaged by such surges, then destroyed by hurricane winds; homes damaged by hurricane winds, then destroyed by flooding; and homes destroyed entirely by flood. This taxonomy does not lend itself to the market-segmenting function of the ACC because two of its categories are highly indeterminate. Moreover, if the insurance industry's interpretation is correct, *there is no insurance product available for losses caused partially by flood and partly by wind.*[76]

D. *Judicial Regulation of Insurance Products*

Of course, these observations merely provide an interpretive backdrop for the resolution of insurance disputes. This resolution reflects the continuing tension within insurance law between a tort theory of interpretation (roughly analogous to consumer-friendly strict liability law) and a contract theory (akin to warranties and meaningful bargaining).

If an insurance provision is clear, courts will accord it its natural meaning. Very few provisions, however, cannot be made to appear ambiguous given unusual facts and creative lawyering. At this point, several avenues present themselves. Interpretive canons may lend clarity to what is merely a complex, though not necessarily ambiguous, provision. In an ordinary contract, evidence of the parties' apparent intentions is often available. Insurance contracts, however, are classic adhesion contracts: The intentions of the policyholder, if extant, play almost no role whatsoever in the drafting of policy provisions.[77]

To an extent unimaginable in other areas of contract law, courts are highly sensitive to insurance policy ambiguity. Thus, the seemingly conventional doctrine of contra proferentem plays an outsized role in insurance disputes; more often than elsewhere, insurance contract language emerges

76. For reasons discussed below, the National Flood Insurance Program is not designed to be accommodating on matters of causation. It only covers certain types of flood losses.

77. Because insurance provisions are highly standardized and typically submitted to state regulators for approval, there exists the potential to look to drafting or administrative history to inform judicial interpretation. However, this is typically confined to the provisions recognized as controversial at the time of their inception and in no event provides as much guidance as the context-dependent processes of case-by-case adjudication.

as ambiguous.[78] This essentially proceduralist tool has attained a substantive gloss in the form of the reasonable expectations doctrine. It is at this point that the product-liability law conception of insurance law begins to take shape.

Contracts do not have an existence divorced entirely from the expectations and understandings that exist external to them. Indeed, it is precisely such expectations that often induce people to enter into contracts in the first place. An insurance consumer seeks protection from a set of hazards, the precise instantiation of which may be but dimly perceived. Alternatively, the consumer may have very specific hazards in mind, but they may have an imperfect correspondence with the coverage the market ordinarily provides. In theory, proper marketing and negotiation can correctly "reset" either those expectations or the insurance policy itself; in reality, consumers do little to educate themselves about their policies, and most insurer-side communication is either commercial or opaque in nature. Into this most yawning of contractual gaps, courts have stepped in—first gingerly, then decisively—to assert the independent meaning of insurance contract language.

The reasonable expectations of the policyholder come into play in two distinct ways. First, they can lend ambiguity to terms not otherwise unclear. Among a range of potential meanings for a given term, consumers may ascribe one above others which subtly bends the light reflected from the term toward indeterminacy. More directly, reasonable expectations can defeat even unambiguous language that a "painstaking" review would reveal as affording no coverage. In effect, this "strong" form of the expectations principle is analogous to a finding of product defectiveness (the product at hand being an insurance policy that fails to operate as a consumer might expect).[79] In either form, consumers' expectations exert a gravitational effect on the construction of insurance contracts.

E. The Katrina Cases

As of February 2007, there were approximately 1000 cases pending before Judge Senter of United States District Court for the Southern

---

78. One reason for this is that insurance policies have a necessarily contingent relationship with the external world. Despite well-known similarities between ship names, and the mysteries of chicken, most contract disputes arise internally over the contested meanings within the four corners of the document itself. Insurance-triggering events, by contrast, invariably involve causes and phenomena outside of the contract, but—ideally—correctly described by the contract. Although insurers strive to describe the external world with ever-greater (and more complex) precision, the race against "the bottomless-cup chain of events" has proven unwinnable. Thus, insurers seek to design language, wherever possible, to pretermit dispute.

79. Unsurprisingly, the reasonable expectations doctrine has an exact counterpart in products liability law— the "consumer expectations test." And, just as the Restatement (Third) of Torts: Products Liability abandons the two-pronged chimera created by § 402A of the Restatement (Second) in favor of a "reasonableness" test that comprehends both the contract and tort component of a product liability claim, so too would a "negligent drafting" test explain most extracontractual results in insurance disputes. However, courts construing insurance contracts tend to invoke negligence language only indirectly. *See* Kenneth S. Abraham, *A Theory of Insurance Policy Interpretation*, 95 Mich. L. Rev. 531, 534 (1996).

District of Mississippi.[80] Hundreds of other cases have been filed in Mississippi state courts and courts throughout Louisiana and Texas for damages arising from Hurricanes Katrina and Rita. The relevant policies in these states vary slightly from insurer to insurer, and Mississippi homeowners purchase separate windstorm coverage (though usually from their homeowners insurer). However, the essential differences are minor, and should not obscure the policy issue before these several courts: Does the flood exclusion deprive homeowners of coverage for losses caused partially by wind, and partly by flood? In a trio of rulings, Judge Senter set the terms of debate for the cases before him; they are likely to prove highly influential elsewhere.

In *Tuepker v. State Farm Fire & Casualty Co.*,[81] Judge Senter considered the effects of an ACC clause given the restrictive reading of exclusions generally and Mississippi's law regarding insurance causation. Insurance language is construed asymmetrically, depending on the function of the term in question. Grants of coverage are construed broadly, while exclusions are construed narrowly. Thus, the phrase "arising out of," which can appear in several places within an insurance policy, does not have a stable meaning ensuring an even, clear border between seemingly identical policy provisions.

State Farm's policy sprinkles references to exclusion throughout but contains most every imaginable limitation of liability for mixed-cause events:

> We do not insure under any coverage for any loss consisting of one or more of the items listed below. Further, we do not insure for loss described in paragraphs 1. and 2. immediately above regardless of whether one or more of the following: (a) directly or indirectly cause, contribute to or aggravate the loss; or (b) occur before, at the same time, or after the loss or any other cause of the loss[.][82]

The excluded causes listed in the policy include flood and its many variants.

80. As this Article was going to press, attorneys representing Mississippi policyholders (for whom I consulted in this matter) and State Farm announced a tentative settlement of 639 cases. Joseph B. Treaster, *State Farm Negotiating Gulf Claims Settlement*, N.Y. TIMES, Jan. 8, 2007, *available at* http://www.nytimes.com/2007/01/08/business/08cnd-insure.html?ex=1325912400&en=3e2ed478d4116c52&ei=5089&partner=rssyahoo&emc=rss.

81. No. 1:05CV475, 2006 WL 1442489 (S.D. Miss. May 24, 2006).

82. *Id.* at *2. Two terms within the full exclusion dispose of the argument that "storm surge" is impliedly saved from exclusion as a species of mixed-cause loss (as storm surge is caused by the direct and indirect action of wind upon a body of water). First, the exclusion includes water "whether driven by wind or not" (which is itself subject to a different exception). Second, it includes "seiche," which sounds like a Creole delicacy but actually means "an occasional and sudden oscillation of the water of a lake, bay, estuary, etc., producing fluctuations in the water level and caused by wind, earthquakes, changes in barometric pressure, etc." Dictionary.com, seiche - Definitions from Dictionary.com, http://dictionary.reference.com/browse/seiche (last visited Jan. 30, 2007).

Judge Senter identified two bases of ambiguity.[83] Beginning the early 1990s, insurers began offering (sometimes exclusively) windstorm policies with deductibles for hurricane-related losses. Hurricanes are principally windstorms; excluding coverage for wind-related hurricane losses simply because flood losses occur as well is difficult to reconcile with the popular understanding of "hurricane."[84] In light of this, Judge Senter found the policies excluding language relating to "weather conditions" (an overly complicated locution that essentially recapitulates the ACC clause) unenforceable to the extent they purported to preclude coverage for *any* wind losses because of *any* causally related flood loss.[85]

However, not all policies have hurricane deductibles, and this was a secondary rationale.[86] Judge Senter's primary rationale was that excluding "inseparable" mixed-cause losses was an unrealistic construction in the context of a hurricane.[87] This reading is supported by a line of Mississippi cases predating the modern ACC clause but which similarly allocated to the insurer the burden of disaggregating the excluded flood from covered wind losses.[88]

Judge Senter reiterated this ruling in *Guice v. State Farm Fire & Casualty Co.*,[89] another mixed-cause case. The plaintiff in *Guice* argued that because there was some wind damage (undeniable), State Farm was necessarily obligated to pay for the entire loss, the various exclusions notwithstanding.[90] *Tuepker*, however, correctly forecloses this argument.

In response, State Farm had the option of sounding reasonable. Judge Senter had already rejected the argument that storm surge flooding was not "flooding" excluded by the standard policy.[91] As a bench trial would shortly reveal, Judge Senter set blind sympathy to one side and received highly contestable and complicated meteorological and engineering evidence fairly and without prejudice. Although nearly all homeowners insurance policies contain some variation of the ACC language, insurers

83. *Tuepker*, 2006 WL 1442489, at *4.

84. Relatedly, several policyholders and the Attorney General of Mississippi have argued that to the extent windstorm policies were marketed as "hurricane" policies or advertised as protection from "hurricanes," Gulf Coast policyholders would reasonably expect coverage for the other prominent feature of hurricanes—high waters. In isolation, this is a plausible argument; that is, consumers might very well expect the term "hurricane" to encompass the set of catastrophic risks that words such as "Katrina" have imprinted indelibly on public consciousness. The problem is that the term does not appear in isolation but is surrounded by language that clearly directs the consumer to look elsewhere for flood coverage. More importantly, that coverage is in fact available, and consumers often receive specific notice about it. Finally, although the term "flood" unsurprisingly turns out to have some counterintuitive meanings in the insurance context, it is difficult to imagine that these meanings would not encompass many of the losses experienced during Katrina. Judge Senter has ruled that "storm surge" flooding is just that—flooding—and is thus excluded from the policy. *Id.* at *3–4. The Mississippi Attorney General's suit is pending, but as this Article went to press, it seemed headed for settlement.

85. *Id.* at *4.

86. *Id.* at *5.

87. *Id.* at *4.

88. *See id.* at *3 (collecting Mississippi cases).

89. No. 1:06CV1-LTS-RHW, 2006 WL 2359474 (S.D. Miss. Aug. 14, 2006).

90. *Id.* at *3.

91. *Id.* at *4 (citing *Tuepker*, 2006 WL 1442489, at *6).

themselves rarely accord it its literal meaning to deny coverage altogether. But State Farm, in a further confirmation of the supreme unwisdom of constitutional remittitur,[92] elected not to be reasonable; it claimed that because an excluded cause contributed to an "inseparable" loss, coverage for windstorm was eliminated.[93]

Judge Senter aptly described the posture of the case:

> Thus, while the Plaintiff and State Farm have focused on diametrically opposed interpretations of the policy language in an attempt to position themselves to gain instant victory, the fact remains that there are disputed issues that will determine the scope of coverage under this policy. . . . [i]t is my opinion, upon a thorough review of the terms of the State Farm policy, that the damage attributable to wind and rain will be covered, regardless of whether an inflow of water caused additional damage that would be excluded from coverage.[94]

In addition to denying State Farm's motion to dismiss, Judge Senter refused to certify a class action, precisely because of the wide spectrum of contested facts likely to be found among the claims of the putative class members.[95]

Finally, Judge Senter applied these holdings in *Leonard v. Nationwide Mutual Insurance Co.*[96] The *Leonard* case was a bench trial, which reflected an unusual strategy on the part of the plaintiffs of focusing precisely on the meaning of Judge Senter's rulings. Although the short-term result was undoubtedly disappointing for the plaintiffs, the strategy was correct.

The Leonards suffered significant losses when their home was inundated by a wall of water seventeen feet deep.[97] The home sat just over 500 feet from a lakeshore, and the deluge was caused by storm surge.[98] Judge Senter dismissed without much elaboration their claim that storm surge

92. *See* State Farm Mut. Auto Ins. Co. v. Campbell, 538 U.S. 408 (2003).

93. *Guice*, 2006 WL 2359474, at *3.

94. *Id.*

95. *Id.* at *5.

96. 438 F. Supp. 2d 684 (S.D. Miss. 2006).

97. *Id.* at 689.

98. The Leonards' insurance agent, consistent with his practice, advised the couple that they did not need flood insurance. This was extremely poor advice. Because their home was outside of the area of maximum risk, flood insurance was available at exceptionally low cost, reflecting the diminished risk. Assuming that the relevant flood map was accurate, the chance of flooding it describes is correct only with respect to the perimeter of the floodplain. If one imagines a circle describing a slightly depressed "bowl," the rim of the bowl is the area expected to flood once every 100 years. However, the center of the bowl may flood much more often. Similarly, a concentric circle imagined around the bowl may be a "200-year-floodplain," but an area just *outside* of the inner bowl may present a risk nearly identical to one just *inside* it. It is unlikely that the Leonards' insurance agent understood this, a failing that will no doubt be explored in the ongoing wave of claims for negligent insurance broking. It also appears that FEMA does not understand this, as "a large share of [repetitively-flooded properties] are classified as being outside the designated 100-year floodplain, which raises concerns about the accuracy of flood insurance maps . . . ." King, *supra* note 7, at CRS-22.

was wind-driven and thus not excluded, pointedly noting that the Leonards had specifically declined to purchase flood insurance.[99] Reiterating his ruling in *Tuepker*, Judge Senter determined that although mixed-cause events must be sifted through the burden-shifting analysis described above, State Farm had convincingly demonstrated that the Leonard home had been substantially damaged by flood before there was any wind damage.[100] The comparatively trivial wind damage was not excluded by virtue of its causal concurrence with other flood damage.[101] The Leonards thus recovered but a small fraction of their losses—those attributable to wind.[102]

At the time of this writing, the United States Court of Appeals for the Fifth Circuit has accepted *Tuepker* for interlocutory appeal. Although few endeavors are more unavailing than predicting the rulings of life-tenured judges, it is unlikely that this ruling will be reversed. However, it may be affirmed on grounds slightly different than those offered by Judge Senter, though consonant therewith: The anti-concurrent causation language is not unenforceable because it is ambiguous; it is unenforceable because it is not.

V. The Limits of Causal Exclusions

The ACC was born not solely out of farcically creative judicial interpretation, but also from an unrealistic modesty about the judicial function in insurance contracts. Interpretive canons such as contra proferentem permit courts to conceal genuine substantive disapproval under a veneer of procedural irregularity. Courts construing insurance contracts are sensitive that they not appear unduly "activist." Substituting the meaning the parties evidently intended for the one actually conveyed is hardly activism; it is merely construction.

Unfortunately, the reticence to acknowledge the growing substantive character of judicial insurance regulation[103] led to a dynamic that may be observed across a spectrum of insurance disputes. Courts detect what may or may not be a genuine ambiguity and resolve it in favor of coverage. In time, insurers assimilate these teachings into revised policy language, thereby accomplishing the same purpose but with greater clarity. However, the judiciary, sensitized by now to the peculiar dispute, again rejects

99. *Leonard*, 438 F. Supp. 2d at 691.

100. *Id.* at 695.

101. *Id.*

102. *Id.* at 696.

103. Judicial regulation of insurance is an adjunct to administrative regulation. There has emerged recently a debate uncannily similar to the debate within tort law over judicial versus regulatory supremacy. Insurers, and some regulators, suggest that the regulatory approval typically required to market insurance policies ought to provide an imprimatur of sorts, beyond which courts might hesitate to venture. This entirely misperceives the function and competence of state regulators, who are typically overmatched by insurers with respect to technical expertise and resources. There is virtually no insurance policy in use that, although approved, has not been subject to significant judicial qualification and emendation. Courts were interpreting insurance contracts for centuries before the first state department of insurance existed, and state regulators have shown no detectable enthusiasm for significantly withdrawing, by interpretive guideline or otherwise, the role that courts play in resolving insurance disputes. Whether some hypothetical ideal regulator ought to be preferred to the distributed and dynamic processes of common law regulation is a question left for another day.

the proffered language as being insufficiently specific. All the while, the insurance claim assertedly shrouded in ambiguity slowly acquires the coloring of an insurance "right"—an irreducible minimum below which no reasonable insurance policy should fall. In time, the insurer will perfect the disputed language so that no one could reasonably misconstrue it. By that point, however, the war may be over and the court ready to rest judgment on its perception of what an insurance policy *should* contain. As Michelle Boardman evocatively puts the matter, at some point courts effectively declare that the insurance language is "theirs."[104]

This dialectic is unhelpful, for it conceals the true motives of judicial action and offers insurers the false promise that clarity—and clarity alone—is all that is needed to rescue their preferred construction. While insurance law may be retreating at present into a formalist redoubt, such epicyclical dynamics should not obscure this as a longstanding feature of insurance law. For at least 150 years—since the first personal contracts of insurance were available—courts have declined to condone interpretations that afford insureds merely the illusion of coverage.

In this sense, Judge Senter's conclusions in *Tuepker*, et al., are unduly restrained, with one possible exception. The various expressions of the ACC clause are not semantically ambiguous. The intent—more obvious to a drafter, though surely not the layman—is to except the construction of homeowners policies from the tangled skein of causation rules which courts in Mississippi and elsewhere have developed to resolve mixed-cause cases. But two interrelated problems have generally acted to frustrate what might otherwise be regarded as a reasonable re-allocation of risk.

If hard cases make bad law, it is surely true that bad law begets worse insurance language. The drafters of the ACC at best made the mistake of taking several foolish courts at their word, although the relevant exclusions were clear enough for courts acting in good faith to resolve those cases in the insurers' favor. The definitional function of the ACC (articulating that an excluded event retains this character even when other events concur to cause a loss) is unremarkable. What is remarkable is the effort by some insurers to imbue it with the capacity to also remove covered events from coverage. The aggressively literal interpretation of the ACC clause, exemplified by State Farm's arguments in *Tuepker*, is that covered events are to be deprived of this character when the loss is not easily separable from an uncovered event. Thus, if a house suffers an explosion and collapses due to the synergistic effects of a windstorm *and flooding*, there is no coverage whatsoever—even though three of these four phenomena are covered.[105]

104. Michelle Boardman, Remarks at *Panel Discussion, AALS Section on Insurance Law*, Washington, D.C. (2006).

105. Interestingly, the one potential semantic ambiguity revealed by this sequence under the ACC is the precise meaning of the term "loss" as in "loss from water damage." Water, in this example, was a necessary but not sufficient cause of the *entire* loss. Thus, "the loss" would be excluded. Alternatively, the excluded loss could mean only that portion of the loss attributable to excluded causes. Applying contra proferentem on this basis would yield the same result reached by Judge Senter. Alternatively, one could resuscitate this interpretation by claiming that it merely reflects the parties' intent to contract

This is a remarkable argument, one that significantly overshoots its reasonably intended target. It channels the factual question of allocation into the legal question of mixed causation. This feature is no accident, as insurers would prefer to avoid epistemologically-fraught issues because such questions cannot reliably be resolved in their favor. If one assumes a random distribution between wind and water causes of loss, there will be some wind damage 99% of the time. The aggressive construction of the ACC would deny coverage 100% of the time. Thus, the basis for Richard Scruggs's seeming caricature of the insurer argument: "If there's even one drop of water, there's no coverage."[106] Modify this statement only slightly to specify that the water must contribute to the overall damage and it is an accurate summary of State Farm's position.[107]

Ambiguity is not the problem. Illusory coverage is. How can a windstorm policy sold along the hurricane-prone Gulf Coast exclude hurricane-related windstorm losses? Certainly the hypothetical reasonable policyholder would expect such coverage. Without it, the standard homeowners or windstorm policy would indeed be a defective "product." Most spectacularly, this construction would mean that no homeowner would have any coverage for mixed-cause losses because government flood insurance is unusually restrictive. Thus, the prudent consumer who purchases a package of homeowners, windstorm, and flood coverage would, despite this apparent embarrassment of insurance, actually have none at all. By any yardstick, this is an unconscionable result.[108]

In the *Leonard* case, Judge Senter added a substantive gloss to his *Tuepker* ruling. Nationwide, despite having substantially identical language, declined to assert the aggressive interpretation of the ACC clause.[109] After reciting pre-ACC Mississippi cases that reached the same conclusion, Judge Senter observed that such a reading (if uncovered causes contribute in any way, there is no coverage)

out of the rules of proximate causation. However, this is a little like trying to contract out of the laws of gravity. Proximate causation (whether misleadingly denominated "efficient" or otherwise) is an unavoidable consequence of the need to define causal relationships in manageable ways. For over a century, courts have looked directly past "but-for" language to discern the true cause of events in insurance disputes.

106. Richard Scruggs, Remarks at *Insurance and Risk Allocation in America: Economics, Law, and Regulation*, AEI-Brookings Joint Center for Law and Regulatory Studies (Sept. 2006).

107. Although State Farm conceded that separable wind damage would be covered (*see, e.g.*, *Leonard*, 438 F. Supp. 2d at 693), in many cases (such as Tuepker v. State Farm Fire & Casualty Co., No. 1:05CV475, 2006 WL 1442489 (S.D. Miss. May 24, 2006) and Guice v. State Farm Fire & Casualty Co., No. 1:06CV1-LTS-RHW, 2006 WL 2359474 (S.D. Miss. Aug. 14, 2006)) the damage attributable to wind will not be self-evidently separable. But this does not mean that the losses are not susceptible to any allocation whatsoever. Tort law has long managed passably well to allocate liability among tortfeasors whose negligence concurs to create an indivisible injury.

108. As I indicated earlier, I never tire of explaining that unrealized insurance risks still have substantial value; that the insurance function must necessarily balance competing and somewhat contradictory interests and constituencies; and that insurance companies are not (as most of my highly educated correspondents insist) "evil." These efforts, unstinting, are aided not at all by arguments such as those advanced by State Farm here.

109. *Leonard*, 438 F. Supp. 2d at 694.

> would make the windstorm protection illusory for those who live in areas where the risk of flooding is greatest. Nationwide seems to recognize this to be the reasonable interpretation of its policy. Nationwide has not invoked this policy provision to deny coverage to the Leonards for what everyone recognizes to be wind damage.[110]

The upshot of these rulings is that policyholders bear the burden of establishing covered windstorm damage, but insurers have the burden of proving the extent to which the loss is excludable due to flood. This is the correct answer. However, the overall picture is unsatisfying from a policy standpoint. To understand why, it is necessary to locate the law and function of the private insurance market alongside its public counterpart.

VI. THE UNCERTAIN FRONTIER BETWEEN PUBLIC AND PRIVATE

A. *Square Corners and Misshapen Law*

The NFIP is governed by federal common law and the terms of the Standard Flood Insurance Policy ("SFIP"), but administered largely by private insurers. This arrangement has more than a passing similarity to ERISA, in which private health insurers administer insurance contracts governed by federal common law, while being underwritten entirely by employers. There are three principal drawbacks to this approach: Asymmetrical insurance law, asymmetrical insurance coverage, and unintended arbitrage opportunities.

1. Asymmetrical Insurance Law

"Men must turn square corners when they deal with the Government," wrote Justice Holmes over eighty years ago.[111] His advice neatly captures the law's reticence to permit claims against the federal government in derogation of strict procedural requirements. Holmes wrote in the context of a tax refund case, and courts have repeatedly confirmed that exceptions within the tax code are a matter of legislative grace not easily expandable by the equitable considerations courts routinely bring to bear on private disputes.

Several concerns have been thought to underlie this unswerving commitment to procedural exactitude, but they center on the notion of the government as sovereign. As such, the government is free to define the conditions (subject to limited constitutional controls) by which it dispenses

110. *Id.* It bears noting that Nationwide could afford to be generous in this case, as the amount of damage provably caused by water and wind was quite low. However, the court and litigants surely recognized that these early cases would set the tone for hundreds others before Judge Senter and would likely be widely influential as the Katrina litigation unfolds. Yet another problem with this particular construction of ACC provisions is that even a separable wind loss would be excluded if it occurred (as it often would) at the same time as a distinct water-caused loss. Although I remain convinced that the basic problem with the ACC is not ambiguity, the overly elaborate construction of these provisions is self-defeating.

111. Rock Island, A. & L.R. Co. v. United States, 254 U.S. 141, 143 (1920).

benefits; moreover, judicial departures from these rules have been thought to implicate quasi-separation of powers concerns, arrogating to the judiciary prerogatives constitutionally located in the executive or legislative branches.[112] These rationales are not overpowering in their persuasiveness but have become firmly entrenched during the past century. They are of particular importance to the NFIP.

Drawing from the Supreme Court's 1944 ruling in *Federal Crop Insurance Co. v. Merrill*,[113] courts analyzing claims under the NFIP have demanded strict procedural compliance before claims may be entertained. These requirements materially distinguish flood insurance law from ordinary insurance law. Although the *Clearfield Trust* exception to *Erie* and (later) the terms of the SFIP itself provide for the evolution of federal common law—a law that facially resembles state-created insurance law—federal courts are distinctly less generous with respect to their interpretations in the SFIP context.

A review of thirty years of NFIP litigation discloses several patterns. At the broadest level, NFIP litigation pretermits the cycle of drafting, interpretation, and redrafting that characterizes private insurance law. As courts send (admittedly imprecise and often contradictory) signals as to what constitutes acceptable and clear terms of insurance contracts, insurers return to the drafting board and insurance contracts evolve. More subtly, the process of evolution takes place precisely because there are consequences for mistaken guesses. A kind of "natural selection" shines judicial favor upon fair and adequately specified terms and punishes others through enforced desuetude. But NFIP litigation unfolds against the background of governmental immunity. Because so many cases are resolved in the government's favor at the pretrial level (and the remaining cases are heard by judges, not juries), the policy-shaping dynamic of common-law adjudication is absent. Thus, NFIP law has evolved along an entirely different track than private insurance law; its evolution has been primitive indeed.

For example, an astonishing number of litigated NFIP claims are dismissed for failure to comply with the sixty-day deadline for submitting a proof of loss following a flood. While seemingly trivial, this phenomenon actually illuminates the asymmetrical character of NFIP insurance law rather well. Within sixty days of a loss, a claimant must file a sworn proof attesting and itemizing the amount of loss.[114] Recall that private insurers are the agents of the NFIP, just as they are agents of private insurance companies. Sixty days is a remarkably short time in which to gather full information, given that flooding is a highly correlated event. Adjusters,

112. A short treatment of this issue may be found in John F. Conway, *Equitable Estoppel of the Federal Government: An Application of the Proprietary Function Exception to the Traditional Rule*, 55 FORDHAM L. REV. 707 (1987).

113. 332 U.S. 380 (1947).

114. FEMA, Standard Flood Insurance Policy VII (J)(4), at 13, *available at* http://www.fema.gov/pdf/nfip/gpp127.pdf (last visited Jan. 18, 2007) [hereinafter SFIP].

contractors, and building materials are in short supply after catastrophes because floods usually impact hundreds if not thousands of homes at once. Failure to account for such "demand surge" is an unfortunate aspect of a federal policy designed to help people.[115]

Somewhat more disappointing is the quality of assistance often received. Policyholders typically rely on oral and written assurances from their agents and adjusters regarding the sequence of steps to be followed in claiming under the NFIP. Essentially, they are relying on these actors to furnish the facts needed to complete a flood claim. In numerous instances, claimants fail to meet the deadline because discussions with the apparently responsible authorities are ongoing or the authorities have informed the claimant that the matter is being tended to. Unfortunately, the SFIP is extraordinarily clear that nothing less than a written waiver from the Federal Insurance Administrator suffices to relax any NFIP requirement.[116]

Applying the concededly plain meaning of this provision, the majority of courts have refused to estop the NFIP from denying coverage even in cases of obviously reasonable and foreseeable reliance by consumers on the assurance of their agents. This result is directly contrary to what would occur in a private insurance context; although insurance contracts regularly purport to withdraw from agents any power beyond referral to the home office, a central characteristic of private insurance law is the doctrine of apparent agency, notwithstanding such provisions. Indeed, one of the most vexing problems private insurers face is that of disciplining agents who have a well-documented propensity to sell out their principals. This conscious allocation of legal system error to insurers, as described above, is one of the most salient features of insurance law. Very few, if any, private insurers would succeed in avoiding waiver or estoppel merely by pointing to the language of their contracts; indeed, such doctrines are needed precisely because of these provisions (and the simplistic notion that underlies them). This dichotomy has been specifically recognized by courts which nonetheless felt bound to the strict requirements of the NFIP.[117]

---

115. *See, e.g.*, King, *supra* note 7, at CRS-12 n.35 (observing that price data typically used by adjusters do not account for the 25–50% increases which data publisher suggests should be employed following major disasters).

116. SFIP, *supra* note 114, at 11.

117. "The elements of traditional estoppel are plainly present in this case. Had the Phelps purchased their flood insurance from a private carrier, there would be no doubt whatsoever that they could have invoked the doctrine." Phelps v. FEMA, 785 F.2d 13, 16 (1st Cir. 1986) (reluctantly concluding that the *Merrill* doctrine barred the use of equitable waiver absent written waiver by the Federal Insurance Administrator).

There is also an interesting political science question that emerges here. My review of several decades of NFIP cases discloses a fair number of apparent frauds, and it is common, in the private insurance context, for insurers to rely on technical defenses where the evidence of fraud is lacking (but convincing to a fair-minded insurer). This only explains a fraction of possible NFIP motives in these cases. What is striking is the remarkable parsimony of actors who ought to be unconstrained by notions of competition or profit. The equities of the typical (unsuccessful) waiver case are self-evident. While it is easy to understand why a profit-making venture would tend to seize on any procedural lapse to avoid payment of a meritorious claim, it is less clear why the NFIP, entirely underwritten by the Treasury—and not in the form of a direct subsidy—would display these same characteristics. To put the point more directly, unlike a system of tax collection, the whole point of the NFIP is to pay flood claims

2. Asymmetrical Coverage

The same qualities of ungenerous construction that govern procedural issues also carry over into the substantive analysis of coverage under the NFIP. Recall the importance of clear factual and legal borders in market-segmenting exclusions. Ideally, the meaning of "flood" would be stable not just across different insurance companies (it generally is) but across different *types* of insurance as well. That way, consumers can correctly assess where one policy will end and another will take up the slack.

This is less than a matter of terminology than it appears; it is primarily *jurisdictional.* In private insurance disputes, common law courts are able to harmonize the interpretation of policies that share coverage borders (e.g., homeowners versus automobile) to ensure that the overall insurance picture has no unnecessary gaps and conforms to the reasonable expectations of consumers. Essential to this process is that fact that courts control the construction of both sides of the border, from interpretation to allocation. The structure of the SFIP and litigation arising thereunder inhibit this.

I would like to illustrate this by touching briefly on an unusual aspect of the NFIP's definition of flood. When a property is inundated for any substantial amount of time, the recession of water often leaves the soil unstable. This instability or loss of consistency causes a condition of subsidence that can severely damage the foundation of the home. A priori, this would seem to be a loss due to flood. Although one could fairly characterize it as a type of damage to the land or earth movement, private insurance does not cover damage to land or earth movement; the standard policy specifically excludes subsidence. These exclusions are not unreasonable in light of their market-segmenting purpose. Astonishingly, however, the situation described is not covered by the NFIP, either. In relevant part, the SFIP defines "flood" as including such subsidence only where it occurs along a lake or body of water that is subject to unusually high water levels (as in a flash flood or tidal surge). In other words, a home that suffers a general condition of flooding that manifests as soil undermining is not covered.

---

to people who have, in fact, purchased flood insurance. Reading the niggardly construction given in most cases leaves one with the uneasy feeling that courts and the NFIP conceive of the program as a kind of welfare system in which individuals should be thankful for whatever the state graciously provides. There is often very little appreciation that NFIP claimants are consumers, much like those in the private market; the typical policyholder's premium is currently unsubsidized, and the NFIP is largely self-funding. This misunderstanding has been the expressed position of the NFIP. *See* King, *supra* note 7, at CRS-11–12 (noting criticism of NFIP's practice of low claims payments and the Federal Insurance Administration's explanation before Congress that policyholders were not entitled to restoration to pre-flood status, but merely to some assistance to *help* them recover).

In sum, the institutional approach to litigation that Judge Senter wryly observed in the Katrina cases is, if nothing else, understandable. The reticence of the NFIP is less so. It also bears noting that many courts have somewhat credulously interpreted the modest percentage of NFIP recoveries allocable to private insurers as administrators (3.3%) as evidence that insurer-administrators have every incentive to treat flood claims generously. This assumption finds no support in the practices of WYO insurers. *See, e.g.*, *id.* at CRS-12–13 (describing lawsuit challenging unfair claims practices of WYO carriers).

Part of the problem is the uneasy and uncertain relationship the NFIP has with erosion. Erosion is an inevitable force in certain communities, and the original 1968 legislation excluded coverage for any erosion-related loss. By a 1973 amendment, this exclusion was softened to except sudden or unforeseeable erosive events from exclusion, denying coverage only where the erosion was gradual and foreseeable.[118] It is certainly debatable whether insurance should be offered on anything other than a "fronting" basis for losses that are simply a matter of time; however, it is clear that policies have been sold under these conditions for losses that were highly likely to be excluded under the SFIP. This type of illusory coverage would not be countenanced by the private law of insurance interpretation. Moreover, it is likely (though not certain) that the exception for lake-adjacent subsidence (particularly inasmuch as this situation presents a greater moral hazard than non-adjacent subsidence) would not survive careful application of the reasonable expectations doctrine. In practice, however, that doctrine is not available in litigation under the NFIP.

Although this particular exclusion does not implicate the wind/water distinction in private insurance, it does put pressure on the "earth movement" exclusion—an exclusion that is interpreted under the distinctly consumer-oriented law governing private insurance disputes. In the next section, I suggest the unhealthy dynamic these pressures create.

3. Claims Arbitrage

There are three significant opportunities for claims arbitrage that, while an unavoidable feature of any legal system, are enhanced by the imprecise borders between private and public insurance. Every actor in this play has a strong incentive to shift losses to others, and the results are unpleasant.

a. *Insurers As Agents*

A central problem in the law of insurance disputes is that of principal-agent. At nearly every phase of the insurance transaction—marketing, negotiation, adjustment of losses, and settlement—insurers rely on intermediaries whose interests are not fully aligned with their own. Particularly in view of courts' willingness to contrast the apparent or ostensible function of insurance contracts with their actual terms, there are very few insurance disputes that do not in some way involve the principal-agent problem. There is no reason to believe that this problem disappears when insurance companies are the agents and the government is the principal; indeed, it is likely much worse.

Because the WYO program relies on private insurers, it is likely that most policyholders get coverage through the insurance agent who procures their homeowners policy. In some cases, the agent is essentially a broker,

118. COMMITTEE ON COASTAL EROSION ZONE MANAGEMENT, MANAGING COASTAL EROSION 72–73 (Committee on Coastal Erosion Zone Management ed., National Academy Press 1990).

and the policyholder is actually dealing with two separate insurers (or three, in the states that have disaggregated windstorm coverage from homeowners policies)—one of which is merely the "face" of a program underwritten by the government. Where the private homeowners' insurer and the flood insurance administrator are in fact the same company, the insurer has an unusually attractive opportunity to recharacterize wind losses as flood losses as it is the very entity tasked with investigating flood claims for the government.[119]

Relatedly, this incentive is equally present in the absence of flood insurance. The only difference is that the insurer is not as well-positioned to "concede" liability on behalf of the federal government. Such behavior is surely unconscionable, but the extent to which it occurs is unknown. This is shortly to change. One of the most sensational strands of the Katrina litigation is the claim that State Farm and other insurers, along with the engineering firms they engaged to investigate claims, conspired to alter or fabricate analyses so as to shift losses away from the insurers (i.e., toward the category of "flood"). The particularity of these allegations is striking, and their detailed explication is eagerly awaited by observers outside the insurance industry. As it happens, one disaffected policyholder is United States Senator Trent Lott, whose Pascagoula home was destroyed by Katrina. Senator Lott inserted a provision into a Homeland Security funding bill to require the General Accounting Office to investigate the extent to which insurers under the WYO program have "improperly attributed" wind losses to the NFIP.[120]

If these suspicions strike the fair-minded reader as being rather uncharitable, it is worth noting that these are precisely the kinds of sentiments insurers harbor regarding their own policyholders. Again, much of the modern insurance contract and underwriting is structured around prevention and mitigation of moral hazard. But this is nothing new. A century ago, an insurance executive observed that "if the right hand is insured, and the left is not, more often than not it is the right one that goes." Nothing in the century since has detectably altered this perception, and there is little reason to believe that only individuals are so tempted.

b. *Insurers As "Fiscal Agents"*

A more speculative, though intriguing arbitrage opportunity lies with the ability of insurer-administrators to test claims and interpretations under the NFIP at zero financial risk. Insurance claims practices are governed by a congeries of administrative, statutory, and judicial regulation. Simplifying greatly, this regulatory scheme imposes penalties on insurers who fail to

119. The same phenomenon is familiar to anyone who has shared a bag containing two or more orders of french fries. It is difficult for the custodian of the bag to reliably withdraw fries solely from his own order until he reaches home. Moreover, when delivery takes place, it is usually the case that a few fries have found their way to common area of the bag. In few other cases is the doctrine of *Pierson v. Post* more unhesitatingly asserted.

120. Sam Friedman, *Lott Sics Feds on Katrina Insurers*, NATIONAL UNDERWRITER, Oct. 12, 2006, http://www.property-casualty.com/2006/10/lott_sics_feds_on_katrina_insu.html.

investigate claims in a timely and reasonable manner or who employ claims practices calculated to frustrate the resolution of meritorious claims. Such practices are broadly proscribed as "bad faith" claims.

Because the NFIP is governed by federal common law, it would have been natural for courts to borrow jurisprudence from the state law-based claims practices to create a set of penalties to deter and punish unfair claims practices. However, the federal government has not assented to such common law rulemaking; as insurers are merely the fiscal agents of the NFIP, courts have generally concluded that no extracontractual claims may be sustained for cases of insurer-administrator misconduct.

The upshot is that when a WYO insurer dons its NFIP hat, not only is it playing with someone else's money, it is playing by a set of rules entirely different from those that govern its private insurance transactions. But WYO insurers are, of course, repeat players in the business of adjusting and litigating claims that will often involve many of the same issues. NFIP immunity permits insurers to negotiate harder (to the point of unreasonableness) on rebuilding costs because there is no real penalty for doing so. The incentive lies in the fact that WYO claims practices will help determine what constitutes a reasonable (or at least plausible) claims practice outside of the WYO context.

For example, House A and House B are both insured by WYO, Inc. Both suffer extensive hurricane damage, but only House B carries flood insurance. To the extent A's losses are covered, many of them will be the kinds of losses and expenses that B will incur as well. The rational move is for the insurer to negotiate B's flood claim first. By using as leverage the fact that B can, at most, compel WYO to pay what it owes—with no hope of extracontractual penalties—WYO should be able to negotiate lower payments for the costs of rebuilding.[121] This establishes a lower baseline for what will be very similar damage claims brought against WYO by A and B's private policy. Whether these non-NFIP claims are litigated or merely adjusted privately, WYO has lowered its overall costs by placing a bet that may not pay off but which it simply cannot lose. This incentive is unacceptable.[122]

121. Obviously, a Valued Policy Law ("VPL") would deter this, but only in cases of total loss do VPLs come into play. And Mississippi, for example, does not have a VPL that obviously applies to windstorm claims.

122. Steve Kanstoroom, who might be described as a free-lance muckracker of the NFIP, reports "low-balling" by private adjusters who wish to avoid setting precedents for non-flood claims. According to former Federal Insurance Administrator (and current consumer advocate) Robert Hunter, this pattern may be traced to the 1970s. *Review and Oversight of the National Flood Insurance Program: Hearing Before the Subcommittee on Housing and Community Opportunity*, 109th Cong. 150 (2005) (written statement and report of Steven J. Kanstoroom, Pattern Recognition and Fraud Detection Expert).

c. *Judicial Arbitrage*

Insurers are not the only self-interested actors. Policyholders similarly have a great incentive to characterize losses as insured, rather than excluded. Of course, policyholders cannot enforce their preferred allocations without judicial assistance. It is here that the bill for our system of fractured ownership over catastrophe risks begins to come due. And it is addressed to the insurance industry.

Leonard was a case with unusually decisive facts. Though the law that emerges from the "Senter Trio" is correct and quite favorable to policyholders, the Leonard's claim was a rather inhospitable platform. Moreover, *Leonard* was a bench trial in which the court's findings could be scrutinized and evaluated without speculation, if need be, on appeal. Insurers are unlikely to see many such successes going forward.

Recall that after a policyholder establishes wind as a cause of loss—not a terribly difficult proposition after a hurricane—it falls to the insurer to establish the existence and extent of exclusion for flood. To the extent the insurer is unable to establish a plausible allocation, the default conclusion will be total liability.[123] To the extent that evidence does support a plausible allocation, there is a substantial likelihood that juries will construe doubts against the insurer. Regrettably, juries are somewhat likely to do this even in cases where the doubts are few.

Again, part of this dynamic is justified on the basis of insurance law's implicit allocation (across a spectrum of disputes) of the risk of legal system error to the insurer. This is as it should be, but that conclusion is more satisfying when one imagines the errors to be relatively few. But the other part of the dynamic is that judges and juries will undoubtedly understand what the "right" answer is with respect to allocation questions. Realistically, there is a significant possibility that some combination of sympathy,

---

123. In 2004, a Florida appellate court concluded that Florida's VPL required full compensation in the event that a covered peril contributed to a total property loss. Mierzwa v. Florida Windstorm Underwriting Ass'n, 877 So. 2d 774, 778 (Fla. Dist. Ct. App. 2004). This is an extremely novel interpretation of the VPL, whose original purpose may be analogized to incontestability statutes common to life insurance that eliminate the insurer's right to challenge the validity of the policy after two years but do not restrict the insurer's right to argue that the policy is inapplicable. The function of the VPL is not to address questions of allocation (the segregative function described above), but rather to prevent the insurer from engaging in post-claim underwriting by contesting the value of the property it has agreed to insure for a stated value.

Reaction to *Mierzwa* was swift and hostile, owing in part to the series of hurricane losses Florida insurers had experienced that year. The Florida legislature subsequently amended the VPL to clarify that uncovered losses did not become covered simply because the insurer was pre-committed to a stated valuation. Significantly, the burden of establishing the uncovered causal contribution was explicitly allocated to insurers: If the evidence does not permit allocation between covered and uncovered causes, the insurer is liable for the entire VPL amount. FLA. STAT. § 627.702(1) (2003). To date, only one other Florida appeals court, in *Fla. Farm Bureau Cas. Ins. Co. v. Cox*, has followed *Mierzwa*; an excellent analysis of the proper relationship between valued policy laws and causation may be found in the dissenting opinion. No. 1D05-4111, 2006 WL 3024902 (Fla. Dist. Ct. App. Oct. 26, 2006) (Polston, J., dissenting).

empathy (for jurors will themselves be drawn from storm-ravaged communities), and antipathy toward insurance companies will systematically distort causation verdicts away from the abstractly correct, though practically unobservable, allocation. In view of the wide range of constituencies that will be impacted thereby, this result is unsatisfying.

It does, however, provide insight (unlikely to be candidly acknowledged) into State Farm's strategy of aggressively interpreting the ACC clause. Just as the legal border between wind and water cannot reliably be policed by causation language, the factual border between these causes cannot reliably be expected to emerge from case-by-case adjudication. Moreover, one cannot overstate the contested nature of the evidence most cases are likely to present. Reasonable juries will be presented evidence that will plausibly sustain verdicts in either direction, and appellate courts are unlikely to have greater insights upon review. Insurers certainly will not lose every case in front of hometown juries; however, they will tend to lose more than would be the case in a perfectly functioning system. Perfection, alas, is generally an unavailable option. And it is absolutely unattainable within the present system of fractured ownership over hurricane losses.

VII. The Case for Catastrophe

In this final section, I wish to draw upon the observations above and outline the path to reform. Reform need not take place in a vacuum; many European countries have addressed the problem of insuring catastrophic risk. A survey of approaches suggests the full range of options and the problems with each.[124] Broadly speaking, choosing among divergent approaches to similar problems is to trade failures likely to occur under one system with those failings thought politically feasible under another.

A fascinating study is the case of the United Kingdom. For over fifty years, the U.K. approach has been to rely on private insurers to cover flood risks. In return, the State provides for flood mitigation efforts to reduce and make more predictable insurers' burden. This longstanding (albeit informal) arrangement is referred to as "The Gentlemen's Agreement."[125]

This arrangement has come under strain in recent years, as a series of floods exposed the Agreement's susceptibility to public moral hazard (public entities neglecting flood mitigation because the risk is insured) and the diffuse responsibility for flood management among local and national authorities.[126] These problems should be familiar to the attentive reader of

---

124. *See* U.S. General Accounting Office, GAO-05-199, Catastrophe Risk: U.S. and European Approaches to Insure Natural and Terrorism Risks 32–38 (Feb. 2005), *available at* http://www.gao.gov/new.items/d05199.pdf (noting widespread adoption of public/private hybrid catastrophe risk plans throughout Europe, as well as prominent instances of no formal governmental role).

125. Michael Huber, *Reforming the UK Flood Insurance Regime: The Breakdown of a Gentlemen's Agreement*, ESRC Centre for Analysis of Risk and Regulation, Discussion Paper No. 18 (Jan. 2004), *available at* http://www.lse.ac.uk/collections/CARR/pdf/Disspaper18.pdf.

126. Huber, *supra* note 125, at 6–9. It is interesting to note that this is a variation on the phenomenon of "risk selection" identified by Jametti & von Ungern-Sternberg, *supra* note 16; only here, it is to the private side of the public-private partnership that an increasing share of risk is left.

the present Article.[127] Reform in the U.K. was instigated by insurers' awareness of their exposure and of their need for control mechanisms (such as price variation and the ability to withdraw from risky markets). In turn, it is hoped that this system of indirect private governance will bring appropriate pressure to bear upon direct public governance bodies (e.g., local land use planning officials).[128]

A. *The Business of Insurance Is Flood Insurance*

In the United States, it is time for insurers to recognize that, despite their efforts, they are similarly already in the business of providing flood insurance. One of the effects of the NFIP is to "reclaim" what might otherwise be financially uninhabitable flood-prone areas. Not only are existing communities sustained, but they are enhanced and new ones developed because the risk of disaster has been intermediated. From the perspective of private insurance companies, this appears to be a positive development, as it enhances the demand for their products. Homes that otherwise would not be built or maintained require appropriate homeowners coverage. Prudence may also require appropriate flood insurance, yet the public-private asymmetry continues here. As described earlier, many homes that ought to have flood insurance do not, and many of those homes are privately insured. The result is that insurers' growth in high-risk areas comes at a substantial implied cost—the risk that when catastrophe strikes, the private insurer will be the only available target.[129] This risk is obviously greatest with respect to coastal (rather than riverine) flooding.

127. Equally familiar is the German experience, where an estimated 3% of households were covered by optional private flood insurance at the time of 2002 floods that resulted in approximately $25 billion in damages. *See* Jennie James, *Who's Going to Pay the Bill? Insurers May Have a Hard Time Stumping Up Billions to Fix the Damage*, TIME (EUROPE), Aug. 18, 2002; Mary Dejevsky, *Floods: Towns of Eastern Germany See New Prosperity Washed Away*, THE INDEPENDENT (LONDON), Aug. 25, 2002. Unsurprisingly, the burden of the uninsured ultimately fell to the German government.

128. Huber, *supra* note 125, at 15–17. Huber draws an interesting political science lesson, namely that the historic success of the Agreement rested on its essential *opacity*: It was politically sustainable precisely because it concealed from public view the subsidies and moral hazard at play. Reform of the Agreement unveils these processes (and substitutes new ones) in ways that may be economically desirable but politically problematic. Thus, Huber predicts, the Agreement is likely to dissolve over time.

Huber's suggestion does not appear to lead to inexorable unraveling of flood protection in the U.K., but rather the explicit substitution of private regulation for a system of deregulation. It is clear, however, that transparency changes the nature of catastrophic risk management policymaking. In light of the seemingly inexhaustible capacity for political systems to defer problems to the future, this dynamic can only be regarded as salutary, even as it requires careful consideration of its consequences.

129. A vivid illustration of this was timely provided by a recent decision in the New Orleans Katrina cases. Drawing a distinction between "artificial" and "natural" floods, U.S. District Judge Stanwood Duval ruled that an undefined exclusion for "flood" could refer solely to natural flooding and not to flood caused by defective levee construction. *In re* Katrina Canal Breaches, No. 05-4182, 2007 WL 121739 (E.D. La. Jan. 16, 2007). Thousands of policyholders (including Xavier University) stand to collect as much as $1 billion or more as a result of this decision. The decision is incorrect, and if left to stand will no doubt be remembered in New Orleans long after private insurers have fled the market. *See, e.g.*, Rebecca Mowbray, *Commercial Insurer to Pull Out of Area: Businesses Fear Travelers' Move Will Put the Brakes on Recovery*, THE TIMES-PICAYUNE, Dec. 2, 2006, at 1 (describing St. Paul Travelers' plans to withdraw from New Orleans). Although this decision can and should be reversed, it does illustrate the pressures that will inevitably be brought to bear on private insurers active in flood-prone areas. It appears that insurers have taken notice: "[I]nsurance companies say that when

But because insurers' exposure to flood risk is somewhat opaque, they may perceive little immediate self-interest in pushing for flood-mitigation efforts. It is clear that communities and the federal government have failed to police flood risk adequately, Katrina merely being a rather spectacular example of a longstanding problem. I suggest that part of the solution to this problem is to bring other interests into play. NFIP incentives are compromised and moderated by its inability to discipline wayward communities and policyholders. Absent a more robust federal land use planning role that seems plausible, some other mechanism must be found to govern flood risk. That mechanism is the insurance market.

Consider the ways in which the structure of the NFIP inhibits optimal flood risk mitigation. Currently, the NFIP relies on nearly 100,000 floodplain maps to determine risk and premium cost.[130] Upon this superstructure rest the development efforts of approximately 20,000 participating communities. These maps first developed over thirty years ago, and they were largely outdated or inaccurate even then because the baseline data was already ten-to-twenty years old.[131] The NFIP is slowly addressing this problem,[132] but it should be no surprise that it has not acted more decisively. After all, there simply is no penalty to the NFIP for making a mistake. Because it has no real competitors,[133] the NFIP has no incentive to prioritize remapping (an extraordinarily costly and time-consuming process) over other, seemingly more urgent agency needs. As remapping is likely to expand the number of households nominally required to obtain what will be unsubsidized flood insurance, an agency sensitive to political pressures may be disinclined to press vigorously.

Relatedly, NFIP actuarial projections and subsidies do not provide a transparent picture of risk. NFIP's retrospective risk assessment tends to mask the increasingly risky portfolio of policies in force (as has housing price appreciation). Moreover, while the "grandfathering" subsidy is understandable, it does a poor job of communicating to high-risk insureds the cost of ownership and fails to capture the criterion that would ordinarily be most relevant for the provision of a subsidy—namely income.

Most importantly, private insurers (as well as banks and the secondary mortgage market) do not perceive themselves as being directly threatened by flood risk. Whereas windstorm insurers are at least active (if not always

there is a disaster that includes both wind and flood damage, they end up paying more on claims and facing higher costs in litigation because policyholders who don't have enough flood coverage press harder for money[.]" *Id.* The solution for that pressure is not more redrafting (the opinion is comically unpersuasive in explaining why the State Farm ACC clause is sufficient to avoid responsibility, while the ISO clause is not) but rather comprehension and management of flood risk by private insurers.

130. King, *supra* note 7, at CRS-8.

131. *Flood Map Modernization and the Future of the National Flood Insurance Program: Hearing Before the Subcomm. on Housing and Community Opportunity*, 109th Cong. 3 (2005) (testimony of Michael Bullock, President, Intermap Federal Services, Inc.).

132. U.S. General Accounting Office, GAO-05-894T, Flood Map Modernization: FEMA's Implementation of a National Strategy (July 2005), *available at* http://www.gao.gov/new.items/d05894t.pdf.

133. Flood insurance is available on a very limited basis from the private market.

effective)[134] in the inevitable post-hurricane tightening of building codes, only the NFIP is heard to urge that repetitively-flooded properties be elevated or floodplain development be redirected in the wake of a catastrophe. That signal is designed to be weak, and the results are predictable.

At the same time, the NFIP discourages what is admittedly not a particularly encouraging market for private flood insurance. It is unlikely that private insurers could compete meaningfully with the NFIP, inasmuch as the NFIP pays no taxes, generates no reserves, and is indifferent to losing money. Yet the program fails in its basic mission to pre-fund flood losses. Surely, the private market can do better.

B. *Toward a "Seamless Garment" of Insurance Coverage*

I propose that flood risk be incorporated as a mandatory term into all homeowners policies.[135] Several steps are needed to complete this expansion of coverage. First, the federal government should underwrite the

---

134. One-quarter of the insured losses from Hurricane Andrew (at $22 billion, this figure is a distant second to the mark set by Katrina) were attributable to Dade County's failure to enforce its own building code. Burby, *supra* note 4, at 8. Even after Hurricane Katrina riveted the nation's attention on the economic and social risks of natural disasters, Florida was back to business as usual. *See* Andres Viglucci, *Strict Building Codes Rejected*, MIAMI HERALD, July 12, 2006 (describing Florida Building Commission's decision to exclude, in the face of widespread concerns from insurers and others, the Florida Panhandle from statewide windstorm code).

This dynamic is a familiar one that underscores the necessity and limits of relying on insurance as a mechanism for governance. In theory, insurers should be relatively successful in persuading local communities to develop and enforce strong building codes, so as to mitigate insurers' losses. This prediction does not rest on the intrinsic merits of tough building codes, but rather on the simple political fact that few industries have as much lobbying power or make financial contributions comparable to insurers. Across the domains of taxation, tort reform, and administrative regulation, the insurance industry is a case study in the effective use of the political process by private interests.

That effectiveness does not extend to building codes; after nearly every hurricane, there are promises to strengthen anemic regulations (which were largely overlooked in the first place). Why insurers should be spectacularly unsuccessful in this domain is a question beyond the scope of this Article, but there is room for some informed speculation. My suspicion is that, while insurers might bring greater financial clout to the political bargaining table, there are many other actors who have institutional advantages insurers cannot overcome.

Arrayed against the case for strong enforcement are developers and builders (who are relatively wealthy and locally prominent) construction workers interested in maximizing employment, and potential purchasers, who in rapidly-appreciating markets such as Florida are more interested in increasing the available housing stock than ensuring against natural hazards that easily fade in importance. Moreover, all of these actors are local; labor may organize membership against "anti-development" candidates and residents may vote with their feet to favor living in more "hospitable" communities than those represented by the "anti-development" politician. On the other side of the aisle is an insurance company that as a practical matter is not a substantial direct employer in the politician's state and is only nominally a "constituent" thereof. A simple public choice model suggests that the local interests will prevail in such a contest more often than not. This is in fact consistent with actual observation.

This Article's suggestion that natural hazards be more explicitly comprehended within private insurance may profitably be understood as an attempt to design a system that creates the greatest possible incentives for insurers to exercise their influence. As the example above suggests, there will remain substantial political obstacles to the successful promulgation of private insurance governance in this context, but continued reliance on insurers' partial and fragmented investment in land use regulation is unlikely to prove more successful in the future than it has thus far.

135. This would require an explicit act of Congress pursuant to the McCarran-Ferguson Act, 15 U.S.C. § 1012(b) (2006), by which Congress would announce its intent to preempt the regulatory power of the states. Moreover, my proposal contemplates the absorption within the private market of residual windstorm insurers such as Citizens Property Insurance Corporation in Florida and its counterparts in a

remapping of all known or suspected floodplains. Once this is complete, the task of mapping can be turned over to the insurance industry, which can maintain and update this data dynamically (reflecting changing meteorological and development patterns). The NFIP would retain oversight responsibility to ensure that this function is performed accurately and timely. This regulatory jurisdiction could profitably be shared with local insurance commissioners, though they would be required to develop the actuarial expertise and resources necessary to play a meaningful role (i.e., something beyond lobbying NFIP for local exemptions). Private insurers will have an incentive to maintain accurate information because they will lose money to the extent that they do not.

C. *Rates and Subsidies*

At the same time, the market must be given a freer hand in setting rates. Perhaps the biggest impediment to the creation of a private insurance market is insurers' legitimate fear that, once in, they will be expected to subsidize flood losses much as the NFIP does now. Already allergic to regulatory rate setting, insurers' confidence in the process is not enhanced when state governments allow their own residual pool premium increases but deny them to private market participants.

Something approaching the market rate is absolutely essential to signal to consumers that lakeshore views are expensive. It is debatable whether federal policy should be to facilitate high-risk development at all, but that is a discussion left for another day. The assumption of this Article is that governmental policy will continue to subsidize, even if implicitly, the construction and maintenance of communities in places of high risk. The question is how to enlighten that policy without fundamentally undermining it.

There are two categories of subsidies that my proposal requires, one of which will likely be permanent. Eliminating the grandfathering provisions overnight would cause a collapse in home values, as a home's price reflects the implicit subsidy.[136] The effect would be similar if, overnight, an additional million homes currently considered outside SFHA were redesignated to reflect their true risk. The creators of the NFIP envisioned a twenty-five year subsidy phaseout but provided no mechanism for

few other states. Finally, private windstorm coverage would return to its place within the standard homeowners policy.

136. In an Ohio case, a couple purchased a home for $64,500, contingent upon securing a flood insurance policy. Their insurance agent quoted an annual premium of $220. However, this rate was inaccurate; the home's location in a high-risk area required a premium of $7000. Predictably, the insureds dropped their policy (note the absence of an effective mechanism to compel insurance) and three years later suffered an uninsured flood loss. Had they been properly informed (and according to the plaintiffs, had the local county commissioners properly implemented the flood mitigation controls required for NFIP participation) either they would not have suffered a flood loss or they would have declined to purchase the property in the first place. Carpenter v. Scherer-Mountain Ins. Agency, 733 N.E.2d 1196 (Ohio Ct. App. 1999).

ensuring this. Recent amendments to the NFIP have purported to speed up this process, but it is unclear if they will be effective.

My solution is to phase out all location-specific subsidies over a fifteen year period. The declining subsidy must remain transferable to new purchasers to moderate the impact on housing prices. By that point, homeowners will be accustomed to paying near-market rates for flood insurance.

It is unlikely, however, that relatively poor homeowners will ever be able to afford market rates for catastrophic coverage. It is appropriate to redirect the impulse to subsidize toward consumers based on their income. These subsidies may be effectuated in the form of tax credits (hateful as it is to this author to countenance governance via the tax code).

Although imperfect from the standpoint of the free market ideal, the redirected subsidy should unfold against a background of competitive, risk-based ratemaking. One of the great ironies of the NFIP is that it obscures the fact that nearly everyone is at risk for flood-related losses. Flooding is not limited to coastal or midwestern states.[137] Not only are there rivers that occasionally overflow nearly everywhere, but homeowners in western states are at risk for fire-induced mudslides and subsidence.[138] By substantially expanding the policy base, insurers can underwrite flood risk with more manageable loss exceedance probabilities, making the business more attractive. Although risk-based premiums imply substantial variation in rates, a broad portfolio of relatively uncorrelated policies in force reduces the risk of catastrophic loss to insurers.

D. *When All Else Fails*

Just as it is unlikely that the government is going to abandon subsidies for policyholders, it is unrealistic to expect an immediate re-allocation of risk to the private market. There is, in fact, no inherent limitation on the possible relationships between the private market and the government, though in my view, private allocation should be a long-term goal of the system. I suggest two ways in which the federal government can remain involved in the underwriting of catastrophe risk.

First, the government could become a reinsurer of flood risk, roughly analogous to the situation under the Terrorism Risk Insurance Act. Once flood losses reached a certain "attachment point," the federal government could pay a percentage of remaining losses. It turns out that there is no shortage of options for such a structure, and I am hesitant to insist upon one in particular. I would only suggest that the attachment point (say, $1 billion in flood losses) should be company-specific, relatively high, and that the direct insurer remain responsible for some portion of the reinsured losses (such as an 80/20 split). I believe it is crucial to keep insurers focused on their role as flood risk governance bodies.

---

137. King, *supra* note 7, at CRS-5.

138. Such claims are not clearly provided for even under a package of insurance policies, including flood, homeowners, and sinkhole collapse. This gap should remind consumers that floods are not simply someone else's problem.

Of course, insurers would be free to seek private reinsurance. One mechanism that would have the combined virtues of privatization, flexibility, and expanded access to capital, yet still provide a federal role is the catastrophe bond. A catastrophe bond is an event-linked obligation to pay money. In a simple variation, the purchaser of the bond loans money at a rate that varies by specified triggers (such as the declaration by the National Weather Service that a hurricane has formed; the wind speed record at a monitoring station; or a numerical loss target). Until the event occurs, the bond pays, say, 8% interest. Once triggered, the interest payments are suspended, or the principal ceded to the borrower. The borrower here would be an insurer, and the bondholders a virtual reinsurance consortium.

Catastrophe bonds are extremely attractive theoretically because they dramatically lower the barriers to entering the insurance business by transforming physical risk into monetary risk—the kind of risk markets are very good at processing. However, this market is immature, and the currently high transaction costs have relegated "cat bonds" to a small corner of the market.[139]

My suggestion is that the U.S. Treasury create a market for such bonds, gradually ceding control to private issuers as the market matures. Even in these spendthrift times, a Treasury imprimatur is the most reliable of measures and can be expected to significantly lower the cost of accessing reinsurance capital. In this way, the reinsurance function can further market discipline, though it will be moderated (and enabled) by government intervention.

Naturally, reinsurance alone (whether direct or distributed via securities) does not eliminate allocation disputes. However, it does channel those disputes in two highly efficient ways not currently available. First, direct insurers, private reinsurers and the federal government may opt to pretermit allocation disputes via contract. For example, certain catastrophe bonds already have specific triggers that pay without regard to the actual damage sustained: The parties have mutually agreed that if the triggering conditions are met, damage is sufficiently probable to occur that the risk of non-occurrence (a hurricane that somehow skates over insured properties, say) can be factored into the price of the bond more cheaply than litigation can be pursued.

But even where litigation is necessary, the inclusion of flood insurance effectively removes such disputes from the "retail" level of the policyholder to the "wholesale" level of company-wide or regional losses. Determining post-occurrence the relative contribution of covered and uncovered causes is an expensive, epistemologically-fraught exercise. But *estimating* such

139. As the careful reader might well expect, Howard Kunreuther articulated the potential for catastrophe bonds to expand natural disaster coverage several years ago. *See* David C. Croson & Howard C. Kunreuther, *Customizing Reinsurance and Cat Bonds for Natural Hazard Risks*, WHARTON FINANCIAL INSTITUTIONS CENTER Paper 99-34 (1999).

losses over a claims portfolio or geographical area is likely to be much simpler.[140]

VIII. Conclusion: A Nation of Policyholders

One of the virtues of a modest proposal such as this is inevitability. Certainly, it is not inevitable that the federal-state compact on insurance regulation should be breached; nor is it inevitable that private insurers should be required to offer particular coverage. It is not inevitable that the scope of the federal government should be expanded in this way, nor must all homeowners tend unswervingly to the prudent course of full insurance against the spectrum of risks they face.

What *is* inevitable is that our society will continue to assess premiums opaquely through ad hoc post-disaster relief; that insurers will opaquely remain in the flood insurance business to an extent they cannot transparently acknowledge; that communities will elect the benefits of development now when the risks are to be borne elsewhere; and that the NFIP will be reluctant to upset the constituencies of key members of Congress—for who else would choose the focus on NFIP oversight, save for representatives from coastal and alluvial plains? All these processes are inevitable unless a considered decision to act is taken. At the end of the day, "when all else fails,"[141] we are already a nation of policyholders. The only question is whether we are to act as one.

140. In discussion with the author, one Louisiana judge facing a series of so-called "slab" cases (in which there is nothing left but the foundation) wondered how he would possibly be able to explain divergent results based largely on the same (absence of) evidence. My solution eliminates such embarrassments.

141. The leading account of this dynamic is David A. Moss, When All Else Fails: Government As the Ultimate Risk Manager (Harvard University Press 2002), *available at* http://www.hup.harvard.edu/pdf/MOSWHE_excerpt.pdf.